

**FOR OFFICIAL USE**  
**MONTHLY SUPPLEMENT No. 2—MARCH, 1935.**

TO THE  
**MARINE OBSERVER—Vol. XI, No. 117.**  
**MARINE METEOROLOGY.**

**Co-operation of Shipowners, Masters and Mates.**

Captains and Officers of ships registered in Great Britain and Northern Ireland, who wish to co-operate regularly with the Meteorological Office should apply to the appropriate Port Meteorological Officer or Agent, a list of whom, with addresses, is given below.

In accordance with the International Convention for Safety of Life at Sea, the Meteorological Office arranges for certain "Selected Ships" to take meteorological observations at specified hours, and to transmit such observations by wireless telegraphy, for the benefit of other ships and the various meteorological services.

Arrangements are also made for a limited number of ships to keep meteorological logs in certain trades for the purpose of completing the meteorological survey of the oceans.

Ships performing these voluntary duties are known as Observing Ships; the whole as the Voluntary Observing Fleet; and the commanders and officers of these ships as the Corps of Voluntary Marine Observers.

At present the observing fleet is limited to a number not exceeding 360 observing ships. The number of British "Selected Ships" is determined upon the British proportion of world tonnage, on the assumption that there should be a total of 1,000 "Selected Ships" of all nations.

The observing fleet list indicating which are "Selected Ships," with the names of commanders, officers, and other particulars, is published in THE MARINE OBSERVER and kept up to date monthly.

A general description of marine meteorological work, including the particulars desired from intending marine observers, is given in Chapter I of THE MARINE OBSERVER'S HANDBOOK, 5th Edition, which is supplied to all observing ships, and may also be obtained from H.M. Stationery Office, direct, or through any bookseller, price 2s. 6d.

THE QUARTERLY MARINE OBSERVER or MONTHLY SUPPLEMENT is sent regularly to the captain of every observing ship, for the information and guidance of his observing officers, and in the case of "Selected Ships," the wireless operators also. The Captains of observing ships are also supplied on request with charts, and atlases, according to trade, if available, as meteorological equipment.

Ships keeping the Meteorological Log, Form 915, are lent a complete set of official tested instruments.

"Selected Ships," other than meteorological log keeping ships, keep the Ships' Meteorological Record, Form 911. All "Selected Ships" also keep the Ships' Wireless Weather Register, Form 138.

No observing ship is detailed as a "Selected Ship" unless she has on board a reliable mercurial barometer.

Official tested instruments are lent to "Selected Ships" when necessary.

**NAUTICAL OFFICERS AND AGENTS OF THE MARINE DIVISION OF THE METEOROLOGICAL OFFICE,  
 AIR MINISTRY.**

**LONDON** ... Captain L. A. BROOKE SMITH, R.D., R.N.R.,  
 Marine Superintendent.  
 Commander J. HENNESSY, R.D., R.N.R., Senior  
 Nautical Assistant.  
 Room 324, Adastral House, Kingsway, W.C.2.  
 (Telephone No.: Holborn 3434 Extension 421).  
 Nearest station Temple, District Railway.

**THAMES** ... Commander C. H. WILLIAMS, R.N.R., Port  
 Meteorological Officer, P.L.A. Building, King  
 George V Dock (south side), London, E.16.  
 (Telephone No.: Albert Dock 2659. Telegraphic  
 Address: Barometric Aldock, London).

**MERSEY** ... Commander M. CRESSWELL, R.N.R., Port  
 Meteorological Officer, Dock Office, Liverpool.  
 (Telephone No.: Bank 8959. Telegraphic  
 Address: Meteorite, Liverpool).

**Agents.**

**BRISTOL CHANNEL** Captain T. JOHNSTON, Technical College, Cathays  
 Park, Cardiff. (Telephone No.: Cardiff 6813).

The commanders of observing ships keeping the meteorological log are requested to return it (accompanied by Form 138 in the case of "Selected Ships") through the appropriate Port Meteorological Officer or Agent at intervals of not more than five months.

Commanders of observing ships keeping Forms 911 are requested to return them (accompanied by Form 138 in the case of "Selected Ships") by post direct to the Meteorological Office, London, at the end of each voyage, or at intervals of not more than two months.

These forms have the address and "On His Majesty's Service" printed upon them, and should be folded for posting accordingly.

The Port Meteorological Officers and Merchant Navy Agents inspect official instruments in Meteorological log ships half-yearly, and in "Selected Ships" quarterly, when possible; and they will replace defective gear. These officers will also check the accuracy of barometers in observing ships, but marine observers should themselves frequently check by comparison.

The work of the British observing fleet, that of the observing fleets of other nations party to the Convention for Safety of Life at Sea, together with Weather Shipping Bulletins and Gale and Hurricane Warnings conforming to the International Convention for Safety of Life at Sea, provide the necessary information for shipping. Thus a world wide service for all shipping, at the minimum cost to national funds, is provided. Shipowners are asked to facilitate this voluntary work which is done by the commanders and officers of their ships.

Shipowners will greatly assist by facilitating the forwarding of postal matter from the Air Ministry addressed to the Captains of ships.

The masters of all British ships fitted with wireless telegraphy are asked to assist in this service in aid of navigation by making routine wireless weather reports in accordance with the Selected Ship scheme where and when there are not Selected Ships carrying out the service.

This supplementary service to that of Selected Ships is particularly desirable in the regions and seasons of tropical revolving storms.

A pamphlet entitled "Decode for use with the International Code for Wireless Weather Messages from Ships", M.O. 329, Third Edition, price 6d. can be obtained from H.M. Stationery Office. This gives a description of the world wide system of voluntary Selected Ships routine wireless weather telegraphy, the Tables for decoding reports received from Selected Ships, and notes for the guidance of the masters of British ships.

"A Handbook of Weather, Currents and Ice for Seamen" will shortly be published by H.M. Stationery Office, and may be obtained from the Stationery Office or through any bookseller, price 4s. This provides information of the elements named, the Laws of Storms, and gives guidance for weather forecasting at sea. It also gives some information of Ocean Pilotage and is intended as a guide for making use of the services specified in Article 35 of the Convention for Safety of Life at Sea.

**Agents (contd.).**

**CLYDE** ... Mr. ROBERT CLEARY, Master Mariner, The  
 Clutha Stevedoring Co., Ltd., Princes Dock,  
 Glasgow. (Telephone No.: 513 Ibrox).

**FORTH** ... Captain C. G. BONNER, V.C., D.S.C., Leith Salvage  
 and Towing Co., Ltd., 2, Commercial Street,  
 Leith.

**HONG KONG, China.** Lieut. Commander E. H. C. BRANSON, R.N.,  
 Chart Depot, H.M. Dockyard.  
 (Telephone No.: 108 Dockyard).

**HUMBER** ... Captain A. M. BROWN, Ellerman Wilson Line  
 Office, Hull. (Telephone No.: Central 16180).

**SOUTHAMPTON** Captain Sir BENJAMIN CHAVE, K.B.E. Room 35  
 Royal Mail Buildings.

**SYDNEY, New South Wales.** Commander G. D. WILLIAMS, D.S.O., R.D., R.N.R.  
 Captain G. B. MERCER.  
 Customs House. (Telephone No.: B6421).

**TYNE** ... Captain J. J. MCEWAN, Marine School, South  
 Shields.

**DERELICTS AND FLOATING WRECKAGE.**




Date.	Position.		Description.	Date.	Position.		Description.
	Latitude.	Longitude.			Latitude.	Longitude.	
<b>ENGLISH CHANNEL.</b>				<b>North Atlantic—(contd.).</b>			
19.2.35	49°19'N.	4°23'W.	Red conical buoy adrift.	1.2.35	30°19'N.	14°42'W.	Large cylindrical tank, dangerous to navigation.
				6.2.35	43°07'N.	66°11'W.	Flashing white gas buoy.
<b>NORTH ATLANTIC.</b>				<b>NORTH PACIFIC.</b>			
1.2.35	40°30'N.	50°53'W.	Red whistle buoy marked 7. O.S.	8.2.35	45°46'N.	124°55'W.	Log about 30 feet long, 4 feet diameter.



# CHART OF THE WESTERN NORTH ATLANTIC.

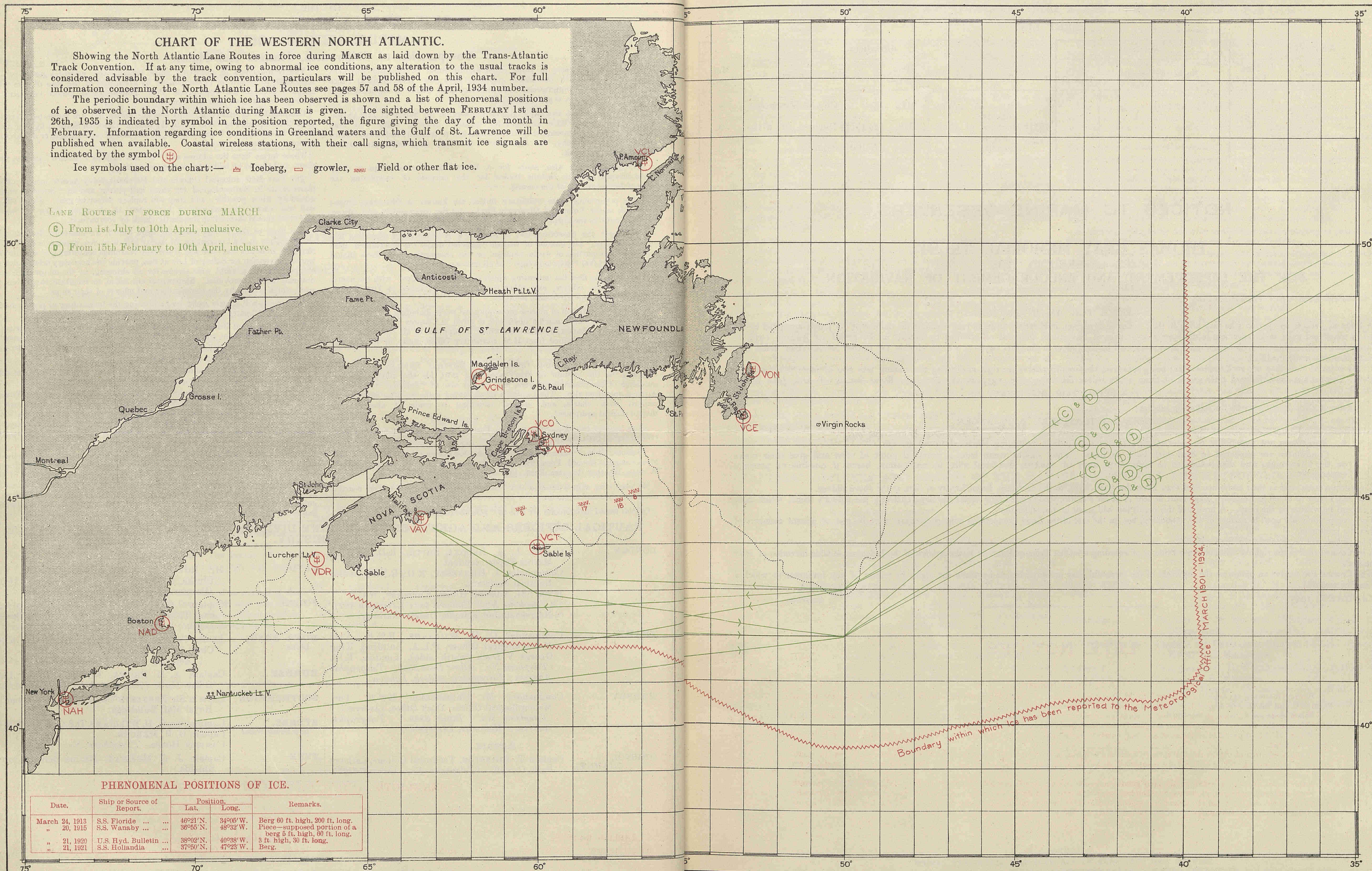
Showing the North Atlantic Lane Routes in force during MARCH as laid down by the Trans-Atlantic Track Convention. If at any time, owing to abnormal ice conditions, any alteration to the usual tracks is considered advisable by the track convention, particulars will be published on this chart. For full information concerning the North Atlantic Lane Routes see pages 57 and 58 of the April, 1934 number.

The periodic boundary within which ice has been observed is shown and a list of phenomenal positions of ice observed in the North Atlantic during MARCH is given. Ice sighted between FEBRUARY 1st and 26th, 1935 is indicated by symbol in the position reported, the figure giving the day of the month in February. Information regarding ice conditions in Greenland waters and the Gulf of St. Lawrence will be published when available. Coastal wireless stations, with their call signs, which transmit ice signals are indicated by the symbol (⊕).

Ice symbols used on the chart:—  Iceberg,  growler,  Field or other flat ice.

## LANE ROUTES IN FORCE DURING MARCH

- (C) From 1st July to 10th April, inclusive.
- (D) From 15th February to 10th April, inclusive.



## PHENOMENAL POSITIONS OF ICE.

Date.	Ship or Source of Report.	Position.		Remarks.
		Lat.	Long.	
March 24, 1913	S.S. Floride ...	48°21' N.	34°05' W.	Berg 60 ft. high, 200 ft. long.
" 20, 1915	S.S. Wanaby ...	38°55' N.	48°32' W.	Piece—supposed portion of a berg 5 ft. high, 80 ft. long.
" 21, 1920	U.S. Hyd. Bulletin ...	38°02' N.	40°38' W.	3 ft. high, 30 ft. long.
" 21, 1921	S.S. Hollandia ...	37°50' N.	47°23' W.	Berg.



# CORRECTIONS

UP TO FEBRUARY 18TH, 1935.

MADE SINCE PUBLICATION OF THE JANUARY, 1935 MARINE OBSERVER  
AND SUPPLEMENT No. 1. FEBRUARY, 1935.

## FLEET LIST.

Additions.		Deletions.		Alterations.			
Name of Vessel.	Met. Equipt.	Name of Vessel.	Met. Equipt.	Name of Vessel.	Met. Equipt.	Name of Vessel.	Met. Equipt.
Arlanza ... ..	S.	100†† Laurentic ...	S.	City of Winchester.	ML.	to City of Winchester	S.
Explorer ... ..	ML.			151†† Duchess of Richmond.	M-S.	to 151†† Duchess of Richmond.	S.
Hurunui ... ..	S.			Samaria ... ..	S.	to 100†† Samaria ... ..	S.
Isle of Guernsey ... ..	S.						
Isle of Jersey ... ..	S.						

## NOTICES TO MARINE OBSERVERS.

### THOMAS GRAY MEMORIAL TRUST

PRIZES OFFERED IN 1935

### FOR THE IMPROVEMENT AND ENCOURAGEMENT OF NAVIGATION.

The Council now offer the following Prizes:

#### I.—PRIZE FOR AN INVENTION.

A Prize of £100 to any person who may bring to their notice an invention, publication, diagram, etc., which, in the opinion of the Judges appointed by the Council, is considered to be an advancement in the Science or Practice of Navigation, proposed or invented by himself in the period 1st January, 1930, to 31st December, 1935. Entries which have already been considered by the Judges in the years 1930-34 are not eligible for further consideration unless they have since been materially modified.

In the event of more than one such improvement being approved, the Council reserve the right of dividing the amount into two or more prizes at their discretion. Competitors must forward their proofs of claim on or before December 31st, 1935, to the Secretary, Royal Society of Arts, John Street, Adelphi, W.C.2.

#### II.—PRIZE FOR AN ESSAY.

A Prize of £100 for an essay on the following subject:

#### MODERN NAVIGATIONAL APPLIANCES.

1. Appliances made possible by electricity on board, e.g., Wireless D.F., Echo Sounding, Gyroscope, etc.
2. Appliances not depending on electricity, e.g., Range Finding, Sounding Machine, Compass, etc.

Candidates are expected to deal with both sections. They should write from a practical point of view and give their views on the advantages and disadvantages or failures (if any) of modern electrical aids to navigation, based if possible on personal experience.

Competitors must send in their essays not later than December 31st, 1935, to the Secretary, Royal Society of Arts, at the above address.

The essays must be typed in English. They must be sent in under a motto, accompanied by a sealed envelope enclosing the author's name, which must on no account be written on the essay. A breach of this regulation will result in disqualification.

Both competitions are open to persons of any nationality, but, in the case of the Essay Competition only, competitors must be past or present members of the seafaring profession.

The Judges will be appointed by the Council.

The Council reserve the right of withholding a Prize or of awarding a smaller Prize or Prizes, if in the opinion of the Judges no suitable invention or essay is submitted.

The Council also reserve an option on the copyright of the successful essay or essays, but do not claim any rights in respect of any invention to which a prize may be awarded.

JANUARY, 1935.

G. K. MENZIES,  
Secretary.

## LATE NOTICES

### Additional Remarks.

Marine Observers are asked to make full use of the space entitled "Additional Remarks" in the Ship's Meteorological Record Form 911, and the Meteorological Log, Form 915, when circumstances apply.

When there are unusual, extraordinary, or spectacular phenomena of the sea and the air, or life in them (birds and fishes) it is desirable that these should be clearly and accurately described, and if possible photographed or drawn.

When the skilled use of intelligence of weather, currents, or ice has aided navigation, these experiences should be carefully and clearly recorded.

A small selection of two or three Weather Charts made during a voyage, which have been the means of forecasting weather subsequently experienced, should be carefully completed in Indian ink, and included, together with additional remarks describing the circumstances briefly.

Experiences, in heavy weather, particularly good or economic passages made, rescues, salvage, if well described, will be of great interest.

Such additional remarks, photographs, sketches, weather charts, and diagrams neatly executed and clearly worded, are invaluable in developing the service in aid of navigation; a good selection of which, published in the Marine Observer's Log of THE MARINE OBSERVER, redounds to the advantage of the British Merchant Navy.

LONDON

PRINTED AND PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE

To be purchased directly from H.M. STATIONERY OFFICE at the following addresses: Adastral House, Kingsway, London, W.C.2; 120, George Street, Edinburgh 2; York Street, Manchester 1; 1, St. Andrew's Crescent, Cardiff; 80, Chichester Street, Belfast; or through any Bookseller

1935. Price 6d. Net.



# MARINE METEOROLOGY.

## Co-operation of Shipowners, Masters and Mates.

Captains and Officers of ships registered in Great Britain and Northern Ireland, who wish to co-operate regularly with the Meteorological Office should apply to the appropriate Port Meteorological Officer or Agent, a list of whom, with addresses, is given below.

In accordance with the International Convention for Safety of Life at Sea, the Meteorological Office arranges for certain "Selected Ships" to take meteorological observations at specified hours, and to transmit such observations by wireless telegraphy, for the benefit of other ships and the various meteorological services.

Arrangements are also made for a limited number of ships to keep meteorological logs in certain trades for the purpose of completing the meteorological survey of the oceans.

Ships performing these voluntary duties are known as Observing Ships; the whole as the Voluntary Observing Fleet; and the commanders and officers of these ships as the Corps of Voluntary Marine Observers.

At present the observing fleet is limited to a number not exceeding 360 observing ships. The number of British "Selected Ships" is determined upon the British proportion of world tonnage, on the assumption that there should be a total of 1,000 "Selected Ships" of all nations.

The observing fleet list indicating which are "Selected Ships," with the names of commanders, officers, and other particulars, is published in THE MARINE OBSERVER and kept up to date monthly.

A general description of marine meteorological work, including the particulars desired from intending marine observers, is given in Chapter I of THE MARINE OBSERVER'S HANDBOOK, 5th Edition, which is supplied to all observing ships, and may also be obtained from H.M. Stationery Office, direct, or through any bookseller, price 2s. 6d.

THE QUARTERLY MARINE OBSERVER or MONTHLY SUPPLEMENT is sent regularly to the captain of every observing ship, for the information and guidance of his observing officers, and in the case of "Selected Ships," the wireless operators also. The Captains of observing ships are also supplied on request with charts, and atlases, according to trade, if available, as meteorological equipment.

Ships keeping the Meteorological Log, Form 915, are lent a complete set of official tested instruments.

"Selected Ships," other than meteorological log keeping ships, keep the Ships' Meteorological Record, Form 911. All "Selected Ships" also keep the Ships' Wireless Weather Register, Form 138.

No observing ship is detailed as a "Selected Ship" unless she has on board a reliable mercurial barometer.

Official tested instruments are lent to "Selected Ships" when necessary.

The commanders of observing ships keeping the meteorological log are requested to return it (accompanied by Form 138 in the case of "Selected Ships") through the appropriate Port Meteorological Officer or Agent at intervals of not more than five months.

Commanders of observing ships keeping Forms 911 are requested to return them (accompanied by Form 138 in the case of "Selected Ships") by post direct to the Meteorological Office, London, at the end of each voyage, or at intervals of not more than two months.

These forms have the address and "On His Majesty's Service" printed upon them, and should be folded for posting accordingly.

The Port Meteorological Officers and Merchant Navy Agents inspect official instruments in Meteorological log ships half-yearly, and in "Selected Ships" quarterly, when possible; and they will replace defective gear. These officers will also check the accuracy of barometers in observing ships, but marine observers should themselves frequently check by comparison.

The work of the British observing fleet, that of the observing fleets of other nations party to the Convention for Safety of Life at Sea, together with Weather Shipping Bulletins and Gale and Hurricane Warnings conforming to the International Convention for Safety of Life at Sea, provide the necessary information for shipping. Thus a world wide service for all shipping, at the minimum cost to national funds, is provided. Shipowners are asked to facilitate this voluntary work which is done by the commanders and officers of their ships.

Shipowners will greatly assist by facilitating the forwarding of postal matter from the Air Ministry addressed to the Captains of ships.

The masters of all British ships fitted with wireless telegraphy are asked to assist in this service in aid of navigation by making routine wireless weather reports in accordance with the Selected Ship scheme where and when there are not Selected Ships carrying out the service.

This supplementary service to that of Selected Ships is particularly desirable in the regions and seasons of tropical revolving storms.

A pamphlet entitled "Decode for use with the International Code for Wireless Weather Messages from Ships", M.O. 329, Third Edition, price 6d. can be obtained from H.M. Stationery Office. This gives a description of the world wide system of voluntary Selected Ships routine wireless weather telegraphy, the Tables for decoding reports received from Selected Ships, and notes for the guidance of the masters of British ships.

"A Handbook of Weather, Currents and Ice for Seamen" has recently been published by H.M. Stationery Office, and may be obtained from the Stationery Office or through any bookseller, price 4s. This provides information of the elements named, the Laws of Storms, and gives guidance for weather forecasting at sea. It also gives some information of Ocean Pilotage and is intended as a guide for making use of the services specified in Article 35 of the Convention for Safety of Life at Sea.

## NAUTICAL OFFICERS AND AGENTS OF THE MARINE DIVISION OF THE METEOROLOGICAL OFFICE, AIR MINISTRY.

**LONDON** ... Captain L. A. BROOKE SMITH, R.D., R.N.R.,  
Marine Superintendent.  
Commander J. HENNESSY, R.D., R.N.R., Senior  
Nautical Assistant.  
Room 324, Adastral House, Kingsway, W.C.2.  
(Telephone No.: Holborn 3434 Extension 421).  
Nearest station Temple, District Railway.

**THAMES** ... Commander C. H. WILLIAMS, R.N.R., Port  
Meteorological Officer, P.L.A. Building, King  
George V Dock (south side), London, E.16.  
(Telephone No.: Albert Dock 2659. Telegraphic  
Address: Barometric Aldock, London).

**MERSEY** ... Commander M. CRESSWELL, R.N.R., Port  
Meteorological Officer, Dock Office, Liverpool.  
(Telephone No.: Bank 8959. Telegraphic  
Address: Meteorite, Liverpool).

### Agents.

**BRISTOL CHANNEL** Captain T. JOHNSTON, Technical College, Cathays  
Park, Cardiff. (Telephone No.: Cardiff 6813).

### Agents (contd.).

**CLYDE** ... Mr. ROBERT CLEARY, Master Mariner, The  
Clutha Stevedoring Co., Ltd., Princes Dock,  
Glasgow. (Telephone No.: 513 Ibrox).

**FORTH** ... Captain C. G. BONNER, V.C., D.S.C., Leith Salvage  
and Towage Co., Ltd., 2, Commercial Street,  
Leith.

**HONG KONG, China.** Lieut. Commander E. H. C. BRANSON, R.N.,  
Chart Depot, H.M. Dockyard.  
(Telephone No.: 108 Dockyard).

**HUMBER** ... Captain A. M. BROWN, Ellerman Wilson Line  
Office, Hull. (Telephone No.: Central 16180).

**SOUTHAMPTON** Captain Sir BENJAMIN CHAVE, K.B.E. Room 35  
Royal Mail Buildings.

**SYDNEY, New South Wales.** Commander G. D. WILLIAMS, D.S.O., R.D., R.N.R.  
Captain G. B. MERCER.  
Customs House. (Telephone No.: B6421).

**TYNE** ... Captain J. J. MCEWAN, Marine School, South  
Shields.

## DERELICTS AND FLOATING WRECKAGE.

Date.	Position.		Description.	Date.	Position.		Description.
	Latitude.	Longitude.			Latitude.	Longitude.	
ENGLISH CHANNEL.				MEDITERRANEAN.			
12.3.35	50°10'N.	1°06'W.	Small spherical spar buoy painted black.	7.3.35	42°48'N.	5°52'E.	Buoy, white light every 10 secs.
NORTH ATLANTIC.				GULF OF MEXICO.			
7.3.35	41°36'N.	64°55'W.	Black conical buoy.	8.3.35	27°35'N.	90°—'W.	Log about 20 feet long and 4 feet diameter.
10.3.35	47°—'N.	7°20'W.	Black and white can buoy adrift, dangerous to navigation.	NORTH PACIFIC.			
				1.3.35	46°22'N.	124°10'W.	Two logs each about 50 feet long, 5 feet diameter.



# CHART OF THE WESTERN NORTH ATLANTIC.

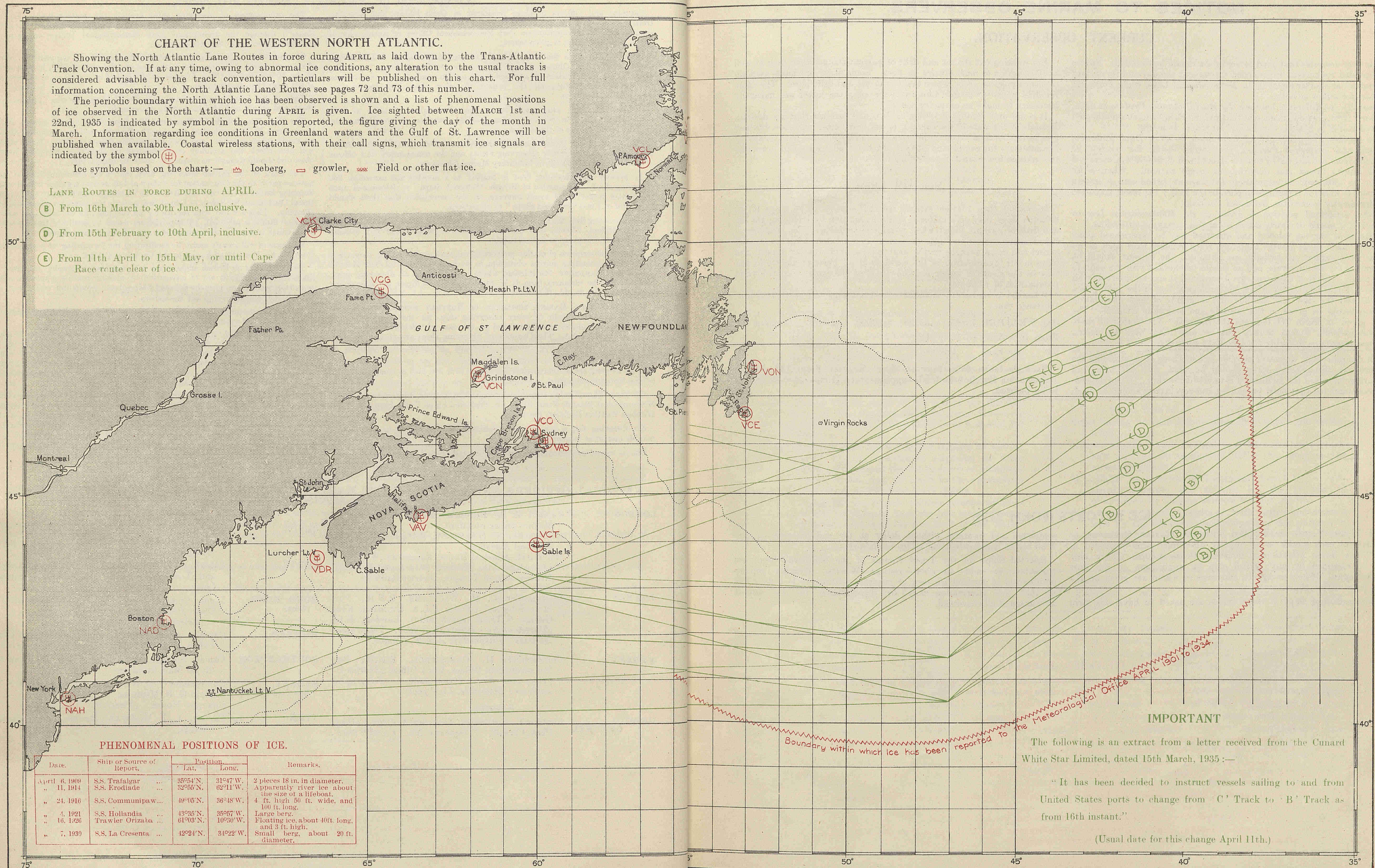
Showing the North Atlantic Lane Routes in force during APRIL as laid down by the Trans-Atlantic Track Convention. If at any time, owing to abnormal ice conditions, any alteration to the usual tracks is considered advisable by the track convention, particulars will be published on this chart. For full information concerning the North Atlantic Lane Routes see pages 72 and 73 of this number.

The periodic boundary within which ice has been observed is shown and a list of phenomenal positions of ice observed in the North Atlantic during APRIL is given. Ice sighted between MARCH 1st and 22nd, 1935 is indicated by symbol in the position reported, the figure giving the day of the month in March. Information regarding ice conditions in Greenland waters and the Gulf of St. Lawrence will be published when available. Coastal wireless stations, with their call signs, which transmit ice signals are indicated by the symbol (⊕).

Ice symbols used on the chart: — Iceberg, — growler, — Field or other flat ice.

## LANE ROUTES IN FORCE DURING APRIL.

- (B) From 16th March to 30th June, inclusive.
- (D) From 15th February to 10th April, inclusive.
- (E) From 11th April to 15th May, or until Cape Race route clear of ice.



## PHENOMENAL POSITIONS OF ICE.

Date.	Ship or Source of Report.	Position.		Remarks.
		Lat.	Long.	
April 6, 1909	S.S. Trafalgar	35°54' N.	31°47' W.	2 pieces 18 in. in diameter.
" 11, 1914	S.S. Erodidae	32°55' N.	62°11' W.	Apparently river ice about the size of a lifeboat.
" 24, 1916	S.S. Communipaw	49°05' N.	36°48' W.	4 ft. high 50 ft. wide, and 100 ft. long.
" 4, 1921	S.S. Hollandia	43°35' N.	35°57' W.	Large berg.
" 16, 1926	Trawler Orizaba	61°03' N.	10°30' W.	Floating ice, about 40 ft. long, and 3 ft. high.
" 7, 1930	S.S. La Cresenta	42°24' N.	34°22' W.	Small berg, about 20 ft. diameter.

## IMPORTANT

The following is an extract from a letter received from the Cunard White Star Limited, dated 15th March, 1935:—

"It has been decided to instruct vessels sailing to and from United States ports to change from 'C' Track to 'B' Track as from 16th instant."

(Usual date for this change April 11th.)



# NOTICES TO MARINE OBSERVERS.

## CURRENT OBSERVATION.

It is very desirable that good current data should be recorded. Spaces are provided for current experienced throughout the day and for current determined at shorter intervals in Meteorological Logs, while Form 911 provides for either or both.

Generally the difference between the *Dead Reckoning Position* at noon, reckoned from previous noon, and the *Observed Position* has been accepted as attributable to a single current for the whole 24 hours.

It is necessary to make careful distinction between *Dead Reckoning Position* and *Estimated Position*, the former being the position as reckoned from the last fix by courses steered and distances run, corrected for all known errors and disturbances *except* current. When a fix cannot be obtained, an estimation for current (when one is known generally to exist) is sometimes applied to the D.R.; the result may then be conveniently termed the *Estimated Position*.

If this estimated position is given in the Meteorological Log or Form 911, it should be clearly stated, otherwise it may be misleading.

Currents of varying velocity and direction may be experienced along the track made in 24 hours; therefore, when reliable fixes such as by Stellar observations at twilight are obtained, the current should be determined for the intervals, and all should be checked with the noon to noon result. Each of these currents determined at shorter intervals than 24 hours should be entered in the Meteorological Log in the appropriate column, and the time and latitude and longitude of each observation position should be given in the latitude and longitude columns. The times given on Form 911 indicate the interval. The period of short interval currents should usually not be less than say, six hours. The best interval is probably from twilight to twilight.

It is desirable that whenever possible two methods of ascertaining the distance run through the water should be used, with one means of measuring the speed the inclination is to credit the ship. When possible it is recommended that both patent log and revolutions should be used.

For working out the set and drift of current the position *from* as well as the position *to* must always be *fixes*. Some observers have used an *estimated position from*, which makes the set and drift false. The same remarks apply to course allowances for set; the latter are naturally necessary to make an *estimated* course.

It is not only records of strong or abnormal currents that are desired. Records of the state of the current, no set, small sets, moderate sets and great sets at all times when the information can be obtained with reliability are necessary for completing current charts for all oceans and providing the information desired in the sailing directions.

## Selected Ships.

In making their routine wireless weather reports to all ships (C.Q.) Selected ships may give material aid to navigation by including the set and drift of current found when considered reliable. This practice of broadcasting the set and drift of current found between Stellar fixes at sunset and dawn twilight in the next routine W/T weather report also helps in our investigation of the currents in all parts of the world and may be the means of improving knowledge of the causes, variations and peculiarities of currents.

When the set and drift is included the code message may be conveniently shortened thus:

C.Q. WEATHER 13167 55106 00000 16979 Current  
From 15N. 52E. To 16N. 54E.  
58° one knot. *Dalgoma*.

Example taken from Selected Ships' Register Form 138 of M.V. *Dalgoma* for March 5th, 1933, supplementary groups of code figures being omitted.

## ICE REPORTS (FORM 912).

Ice Report Forms are supplied with the MARINE OBSERVER or Supplement each month to all regular observing ships employed in the Trans North Atlantic and Southern Ocean trades. They may also be obtained by any British ship on application to the Port Meteorological Officers or Agents, addresses of whom are given on the front page of this chart.

Commanders of ships in these trades are asked to have this form

completed and returned without delay at the end of each passage. A nil return is desired should no ice be sighted.

Selected Ships on the Trade Routes of the Southern Ocean are requested to add to their routine Wireless Weather reports information of floating ice seen or reported within the last 24 hours so that this information may be disseminated to the utmost advantage of all concerned.

## WEATHER REPORTS

The Masters of all foreign going British ships registered in Great Britain and Northern Ireland are requested to make routine wireless weather reports to all ships or the specified coast W.T. stations, when and where there are not selected ships to perform the service, following the procedure of British selected ships.

These reports made in conformity with the voluntary services specified in Article 35 of the Convention for Safety of Life at Sea, are of assistance to navigation, and to the respective Meteorological institutions for many purposes.

The necessary instructions and Tables for coding are given in a pamphlet, M.O.329, which may be obtained from His Majesty's Stationery Office, through any bookseller, price 6d.

A special list of coast W.T. stations detailed to receive these reports will be found on pages 150 to 151, Volume II Admiralty List of W.T. Signals, 1934, amendments and additions last notified in Admiralty Notice to Mariners of 10th November, 1934.

A Handbook of Weather, Currents and Ice for Seamen can now be purchased from H.M. Stationery Office, price 4s.

This book is designed to assist the great majority of officers of the Merchant Navy.

The corps of Voluntary Marine Observers is requested to bring the above to the notice of the officers of ships which are not in the fleet list published in the "Marine Observer."



## FLEET LIST.

### VOLUNTARY OBSERVING SHIPS.

The following is a complete list of British observing ships regularly carrying out voluntary services of marine meteorology with the guidance of the Marine Division of the Meteorological Office.

The names of the Captains and observing officers of observing ships, and the Senior Wireless Operators of Selected Ships are given, as ascertained from the last written return received.

Meteorological Logs, Records, and W/T Weather Registers received between the dates specified at the head of the seventh column are acknowledged by Form number, with commencing and ending dates of period covered by the returns; the date when the last return was received being given in the eighth column.

The Captains of observing ships are requested to take this acknowledgment in cordial thanks and grateful recognition to them and their observing officers and wireless operators for the returns made and the voluntary service rendered in all parts of the world.

The classification of meteorological logs and Selected Ships' records and registers will be notified to the Captains by post card Form 1343. Only in exceptional cases will individual letters be sent to the Captains of observing ships.

The Port Meteorological Officers and Merchant Navy Agents at the ports are advised as necessary, and they will, as necessary, communicate such advice verbally by personal call upon the Captain.

Excellent Awards will be made at the end of the financial year. The names of the Captains and Principal Observing officers gaining these awards will be published in a special list in the Marine Observer.

It is requested that prior notification of changes of service, probable periods of lay up, transfer of Captains, or other circumstances which may prevent the continuance of voluntary meteorological service at sea, may be made to the appropriate Port Meteorological Officer or Merchant Navy Agent.

Ships not making the appropriate written returns within a reasonable period will be removed from the list, steps taken to recover any instruments lent, and the free issue of the Marine Observer discontinued.

The number of voluntary observing ships is limited to a maximum total of 360.

The number of Selected Ships detailed to carry out the voluntary service provided for in Clause (C) of Article 35 of the Convention for Safety of Life at Sea, Merchant Shipping (Safety and Load Line Conventions) Act, 1932, is determined by the British proportion of the world's tonnage; and is at present 287.

Captains are requested to point out any errors which may occur in the list.

#### *Explanation of Abbreviations.*

The number appearing before the name of an observing ship in this list is her number for the time being as a British Selected Ship.

†† indicates fitted with wireless telegraphic apparatus for long range, long wave, continuous wave transmission and reception.

\*† indicates fitted with wireless telegraphic apparatus for transmission and reception; fitted for reception only of long range, long wave, continuous wave.

\*\* indicates fitted with wireless telegraphic apparatus for transmission and reception; but not fitted for long range, long wave, continuous wave transmission or reception.

M.V. = Motor Vessel.

S.T. = Steam Trawler.

Ships having no such letters after their names are steamships.

M.L. = Equipped with a complete set of tested instruments lent by the Meteorological Office for keeping the meteorological log.

M = Ships' own mercurial barometer, found to be sufficiently accurate and reliable for the purpose of observation for making wireless weather reports.

S. = Partly or wholly equipped with tested instruments lent by the Meteorological Office for the purpose of carrying out the duties of a Selected Ship, when detailed to do so.

A. = Ships' own aneroid.

Name of Vessel.	Captain.	Observing Officers.	Senior Wireless Operator.	Meteorological Instrument Equipment.	Line.	Logs, Registers, or Records Contributed. 2.12.34 to 7.3.35.	Date Last Return Received.
122 †† <i>Accra</i> , M.V. ...	J. C. Shooter ...	O. E. Jones, R. M. Monroe ...	G. Arrowsmith...	M.-S.	Elder Dempster...	Fms. 911 & 138 15.11.34 to 16.2.35	19.2.35
055 *† <i>Actor</i> ...	J. Bellett ...	C. C. Heaton, K. H. Davies, D. H. Gordard.	S. Connell ...	M.	Harrison ...	" " 28.1.35 to 8.2.35	15.2.35
123 †† <i>Adda</i> , M.V. ...	J. H. Lawson ...	J. Richardson, H. L. Papworth.	A. L. J. Edwards	M.-S.	Elder Dempster...	" " 29.11.34 to 3.3.35	6.3.35
273 *† <i>Adrastus</i> ...	H. Goodacre ...	T. A. Kent, R. T. Harries, R. Blakey.	S. R. Purkiss ...	M.L.	A. Holt ...	Fm. 915 14.7.34 to 5.12.34	16.1.35
090 *† <i>Aeneas</i> ...	J. Hatfield ...	G. Drake, F. H. Barley, R. E. Huggins.	I. E. Jones ...	S.	A. Holt ...	Fms. 911 & 138 14.8.34 to 28.11.34	31.12.34
166 *† <i>Agamemnon</i> , M.V.	J. G. Reynard ...	B. T. Batho, T. R. Phillips, F. Fisher.	A. C. Nevin ...	"	" ...	" " 21.11.34 to 5.12.34	17.12.34
<i>Aidan</i> ...	C. Saxton ...	A. G. Malcolm, J. Whayman, A. R. Gerrard.	" ...	M.L.	Booth ...	Fm. 915 1.12.34 to 22.2.35	4.3.35
065 †† <i>Akaroa</i> ...	W. G. Summers ...	H. R. Dunnet, J. L. Stolls, U. T. Wood.	" ...	S.	Shaw Savill ...	Fms. 911 & 138 14.7.34 to 16.10.34	1.11.34
032 †† <i>Alaunia</i> ...	E. J. Rodgers ...	A. J. Cuthill ...	H. E. Chamberlain.	"	Cunard White Star	" " 29.10.34 to 24.2.35	2.3.35
<i>Alban</i> ...	L. Evans ...	F. R. Holman, R. Parry, A. S. Richardson.	" ...	M.L.	Booth ...	Fm. 915 8.1.34 to 1.4.34	10.4.34
178 *† <i>Alipore</i> ...	E. F. Hannan, R.D., Commr., R.N.R.	W. T. C. Lethbridge, G. D. Copeland.	C. Wolf ...	M.	P. & O. ...	Fms. 911 & 138 5.11.34 to 12.1.35	6.2.35
175 †† <i>Almanzora</i> ...	T. J. C. Buret ...	A. E. H. Randle, W. S. Thomas, R. Hey.	J. Cadwell ...	S.	Royal Mail ...	" " 5.11.34 to 11.2.35	15.2.35
022 *† <i>Alynbank</i> , M.V.	D. Gillies ...	S. Morris, J. G. Donald, G. Linfield.	K. C. Woodman	M.L.	A. Weir ...	Fm. 915 27.5.34 to 2.11.34	29.12.34



Name of Vessel.	Captain.	Observing Officers.	Senior Wireless Operator.	Meteorological Instrument Equipment.	Line.	Logs, Registers, or Records Contributed. 2.12.34 to 7.3.35.	Date Last Return Received.
160 *† <i>Amarapoora</i> ...	W. C. C. Plage ...	C. C. Weir, R. Treasurer, J. Thomson.	A. Douglas ...	S.	Henderson ...	Fm. 911 5.11.34 to 13.1.35	21.1.35
103 †† <i>Amsterdam</i> ...	B. M. Stone ...	G. G. McPherson, J. H. Mackie, C. C. Howard.	C. McCarthy ...	M.	L. & N. E. Rly....	Telegraphic Report	4.2.35
209 †† <i>Aorangi</i> , M.V. ...	J. F. Spring-Brown ...	E. M. Anderson, L. P. Bourke, A. J. McKenzie	C. F. G. Taylor ...	M.L.	Canadian- Australasian.	Fm. 915 21.6.34 to 5.10.34	6.12.34
120 †† <i>Apapa</i> , M.V. ...	T. V. Hill ...	C. V. Evans, W. E. Humphreys	J. Rea ...	M.-S.	Elder Dempster	Fms. 911 & 138 12.12.34 to 21.1.35	22.1.35
029 †† <i>Appam</i> ...	J. Smith ...	J. A. Cleeton, B. C. Haigh, R. Clark.	R. J. Dowling ...	S.	" "	" " 1.11.34 to 5.2.35	11.2.35
017 †† <i>Aquitania</i> ...	G. Gibbons, R.D., Capt., R.N.R.	H. V. Clarke, G. H. Norris, W. L. P. Cox.	G. H. Sellars ...	"	Cunard White Star	" " 19.12.34 to 8.1.35	10.1.35
115 †† <i>Arandora Star</i> ...	E. W. Moulton ...	L. S. Hassell, E. Huntley Smith, C. Hill-Willis.	C. Hunt ...	M.-S.	Blue Star ...	" " 23.12.34 to 10.1.35	28.1.35
114 *† <i>Ariguaní</i> ...	J. H. H. Sendamore, D.S.C., R.D., Commr., R.N.R.	G. McKee, R. W. Lundy, T. Crane.	E. M. Evans ...	S.	Elders & Fyffes	" " 1.11.34 to 26.1.35	29.1.35
039 †† <i>Arlanza</i> ...	A. Purvis ...	" " " " " "	" " " " " "	"	Royal Mail	" " " " " "	" " " "
091 †† <i>Armadale Castle</i> ...	A. O. Morgan, R.D., Commr., R.N.R.	J. D. Walker ...	P. Haslam ...	"	Union Castle ...	Fms. 911 & 138 20.10.34 to 9.12.34	11.12.34
095 †† <i>Arundel Castle</i> ...	G. J. Whitfield ...	P. G. McIver, P. Clissold ...	A. Donkin ...	"	" " " "	" " 27.10.34 to 17.2.35	19.2.35
233 †† <i>Ascania</i> ...	J. G. P. Bissett, R.D., Commr., R.N.R.	E. W. Connell, H. L. Pryse, E. J. R. Pollitt.	R. Forsyth ...	"	Cunard White Star	" " 12.11.34 to 3.3.35	6.3.35
280 *† <i>Astronomer</i> ...	J. Richards ...	E. T. Pearce, E. V. Dunn, W. G. Ellis.	W. Goldsworthy ...	M.	Harrison ...	" " 29.11.34 to 24.1.35	25.2.35
013 †† <i>Asturias</i> ...	B. Shillitoe, R.D., Commr., R.N.R.	J. H. Rous, J. G. Thomas ...	T. Bradfield ...	S.	Royal Mail ...	" " 6.12.34 to 11.1.35	14.1.35
012 †† <i>Atlantis</i> ...	F. R. Miles, R.D., Capt., R.N.R.	H. M. Rennie, H. Chamberlain, —, Williams.	" " " " " "	M.-S.	" " " "	" " 23.12.34 to 8.1.35	11.1.35
133 †† <i>Avelona Star</i> ...	G. E. Hopper ...	J. Coldwell, L. Allen, J. Golightly.	S. J. J. Scott ...	"	Blue Star ...	" " 19.11.34 to 26.2.35	2.3.35
068 †† <i>Balmoral Castle</i> ...	C. Le Brocq ...	T. McAllen, H. Bunn, A. H. Parry.	J. Sharp ...	S.	Union Castle ...	" " 24.11.34 to 13.1.35	15.1.35
179 *† <i>Balranald</i> ...	H. Williams ...	R. D. W. McKay, L. Cook, G. Edwards.	E. Whibley ...	M.	P. & O. Branch	" " 10.11.34 to 28.1.35	2.2.35
248 *† <i>Banffshire</i> ...	A. W. P. Gibb ...	J. H. Michie, F. H. Petherbridge, H. T. Peletier.	H. Brenholz ...	"	Turnbull Martin	" " 5.8.34 to 30.11.34	13.12.34
180 *† <i>Baradine</i> ...	W. D. C. Smith ...	R. G. Wood, R. S. Kerridge, F. Collinson.	E. Howard ...	"	P. & O. Branch	" " 25.11.34 to 26.2.35	7.3.35
037 *† <i>Baronesa</i> ...	R. W. Compton ...	H. W. Brammall, W. Ellis, B. Ellis.	N. Sanderson ...	"	Houlder ...	" " 27.8.34 to 1.11.34	7.11.34
181 *† <i>Barrabool</i> ...	J. S. Sheepwash ...	J. D. Strike ...	C. T. Seaton ...	"	P. & O. Branch	Fm. 911 19.9.34 to 18.12.34	28.12.34
070 *† <i>Bayano</i> ...	A. W. Legge ...	W. Butcher ...	R. E. Blizzard ...	S.	Elders & Fyffes	Fms. 911 & 138 15.11.34 to 15.12.34	27.12.34
183 †† <i>Bendigo</i> ...	F. N. Wyatt ...	T. A. Sargeant, H. P. Mallett, D. West.	C. Harris ...	M.-S.	P. & O. Branch	" " 30.9.34 to 3.1.35	5.1.35
237 †† <i>Berengaria</i> ...	Sir E. T. Britten, Kt., R.D., Commr., R.N.R.	J. V. Locke, J. D. Archer, F. G. Watts.	J. N. Cragg ...	S.	Cunard White Star	" " 29.11.34 to 21.2.35	25.2.35
145 *† <i>Berwickshire</i> ...	E. H. Evans ...	E. Coulthart, J. C. Robertson, E. J. Brittain.	F. Smith ...	"	Turnbull Martin	" " 20.10.34 to 19.1.35	23.1.35
<i>Birchbank</i> , M.V.	R. B. Ellis ...	F. A. Munday, A. F. King, T. Boal.	" " " " " "	M.L.	A. Weir ...	Fm. 915 16.3.34 to 11.9.34	19.9.34
007 *† <i>Bradfyne</i> ...	J. O'Neill ...	P. Evans, F. W. Burn, O. E. Brown.	T. Pearson ...	S.	Reardon Smith ...	Fm. 911 27.11.33 to 5.11.34	13.11.34
<i>Brighton</i> ...	W. Lidbetter ...	E. Balcombe ...	S. Wood ...	"	Southern Rly. ...	Telegraphic Report... 25.2.35	25.2.35
057 †† <i>Britannic</i> , M.V.	P. R. Vaughan, D.S.C., R.D., Commr., R.N.R.	O. H. Tugwell, A. V. Lucas, W. Nicoll.	J. B. Stone ...	"	Cunard White Star	Fms. 911 & 138 3.12.34 to 21.12.34	27.12.34
269 *† <i>British Admiral</i> ...	H. Faulkner ...	R. M. Shaw, J. J. Nesbitt, W. K. Harris.	F. Turnville ...	M.	British Tankers	" " 7.10.34 to 22.1.35	28.1.35
038 *† <i>British Corporal</i> ...	J. H. Sloan ...	A. E. Undery, W. C. Wall...	G. R. Upton ...	"	" " " "	" " 24.10.34 to 10.2.35	1.3.35
<i>British Enterprise</i> ...	A. Scorial ...	H. A. Scott ...	J. T. Williams ...	"	" " " "	" " 5.12.34 to 7.2.35	11.2.35
249 *† <i>Buteshire</i> ...	C. A. I. Laird ...	P. McMillan, P. H. Hill, J. McLeod.	W. Whimmell ...	S.	Turnbull Martin	" " 25.3.34 to 24.10.34	2.11.34
031 †† <i>Caledonia</i> ...	A. Collie ...	R. Blake, T. K. McMillan, —, White.	J. F. Reid ...	"	Anchor ...	Fm. 912 " 13.12.34 to 29.1.35	18.2.35
139 †† <i>California</i> ...	R. W. Smart ...	J. F. Adams, R. L. Robertson, J. McIntosh.	W. Thompson ...	"	" " " "	Fms. 911 & 138 21.7.34 to 18.11.34	26.11.34
<i>Cambría</i> ...	E. B. Turner ...	F. G. Manning ...	J. Pritchard ...	"	L.M. & S. Rly. ...	Telegraphic Report... 7.3.35	7.3.35
<i>Cambridge</i> ...	R. Williams ...	P. Shakespeare, J. Trotter, V. Canton.	" " " " " "	M.L.	Federal ...	Fm. 915 8.4.34 to 9.8.34	15.8.34
086 *† <i>Camito</i> ...	A. W. Legge, R.N.R. ...	H. J. Perrett, K. MacKay, T. H. Ball.	D. Bussell ...	S.	Elders & Fyffes	Fms. 911 & 138 19.11.34 to 3.2.35	6.2.35
259 *† <i>Canonesa</i> ...	W. H. Brodie ...	H. L. Sherwell, F. F. Flint, E. J. L. Stone.	C. J. Woolway... ..	M.	Houlder ...	" " 14.1.34 to 29.1.35	18.2.35
117 *† <i>Cape of Good Hope</i> ...	T. A. Jacobson ...	D. M. Taylor, D. Perry ...	H. J. Coates ...	S.	Lyle S.S. Co. ...	" " 27.9.34 to 30.11.34	27.12.34
266 †† <i>Carinthia</i> ...	P. A. Murchie, O.B.E., R.D., Capt., R.N.R.	P. L. Williams, J. H. Kenworthy, G. S. H. Hutchinson.	J. Harvey ...	"	Cunard White Star	" " 14.1.35 to 18.1.35	2.2.35
092 †† <i>Carnarvon Castle</i> , M.V.	C. E. Stuart, R.D., Capt., R.N.R.	C. H. Pettitt ...	G. Scurr ...	"	Union Castle ...	" " 1.12.34 to 20.1.35	22.1.35
155 †† <i>Carthage</i> ...	H. N. Jack ...	H. J. Mann, H. J. Cholerton, J. L. Dunkley.	F. Rose ...	M.-S.	P. & O. ...	" " 30.9.34 to 2.1.35	18.1.35
184 †† <i>Cathay</i> ...	C. B. Roche ...	R. E. Cowell, W. Fitzroy, G. L. Farnfield.	H. Dawson ...	"	" " " "	" " 21.10.34 to 24.1.35	29.1.35
011 †† <i>Ceramic</i> ...	W. J. Saunders ...	J. Collins, D. K. Crawford, A. S. Ainslie.	" " " " " "	S.	Shaw, Savill & Albion	" " 11.11.34 to 14.12.34	18.12.34
191 *† <i>Chindwin</i> ...	G. Paterson ...	J. S. Whitehead, J. G. Aitken, A. R. McPherson.	A. C. Headley ...	"	Henderson ...	" " 23.9.34 to 3.12.34	10.12.34
067 *† <i>Chinese Prince</i> ...	W. Irvine ...	E. G. Jones, A. L. Wiles, J. Hennessey.	W. Miller ...	M.L.	Furness Withy ...	Fm. 915 27.7.34 to 23.10.34	11.12.34
192 †† <i>Chitral</i> ...	F. T. Pearson... ..	G. L. Bateman, J. Stansfield, A. Pomeroy.	P. Rowley ...	M.-S.	P. & O. ...	Fms. 911 & 138 16.9.34 to 20.12.34	22.12.34
051 *† <i>City of Auckland</i> ...	W. Rowlands ...	J. W. Cubbon, A. H. Horan, C. Wilks.	L. C. Cullimore... ..	S.	Ellerman ...	" " 27.9.34 to 21.12.34	7.1.35
135 *† <i>City of Barcelona</i> ...	W. Hill ...	J. G. Jackson, R. Jeffers, L. Williams.	J. E. Francis ...	M.	" " " "	" " 20.12.34 to 20.2.35	23.2.35



## FLEET LIST

iii

Name of Vessel.	Captain.	Observing Officers.	Senior Wireless Operator.	Meteoro-logical Instrument Equip-ment.	Line.	Logs, Registers, or Records Contributed. 2.12.34 to 7.3.35.	Date Last Return Received.
265 *† City of Baroda	L. Nicoll ...	H. G. Williams, J. L. Robertson, G. E. Greenhow.	T. H. Coleman ...	S.	Ellerman...	Fms. 911 & 138 12.11.34 to 20.1.35	26.1.35
158 *† City of Cairo ...	A. N. Hogg ...	J. H. Brown, H. Griffith, G. L. Walworth.	R. Cruikshank ...	M.	" ...	Fm. 911 5.11.34 to 24.12.34	8.1.35
282 *† City of Canton ...	J. H. Rutter ...	J. N. Pulford, G. Conolly, D. Lamb.	A. Fitzsimmons	"	" ...	Fms. 911 & 138 13.11.34 to 29.1.35	13.2.35
157 *† City of Delhi ...	J. Wyper ...	W. MacAdam, J. Muir, N. Groundwater.	P. T. Dwane ...	S.	" ...	" " 22.9.34 to 7.2.35	11.2.35
030 *† City of Dieppe ...	H. Cartwright ...	W. G. Baillie ...	G. L. Gilling ...	"	" ...	" " 31.8.34 to 10.12.34	28.12.34
049 *† City of Evansville	D. O. Evans ...	G. Vickers, A. Field, W. Smith.	F. Markham ...	M.	" ...	Fm. 911 " 8.11.34 to 3.2.35	13.2.35
220 †† City of Exeter ...	D. M. Bremner ...	W. S. Jackson, J. Wother- spoon, E. Gillies.	V. Hugo ...	S.	" ...	Fms. 911 & 138 23.9.34 to 25.11.34	17.12.34
089 *† City of Hereford	C. V. Avery ...	L. E. Smith, J. F. Lindell, R. S. Webber.	J. I. Morse ...	M.	" ...	" " 19.9.34 to 29.12.34	5.1.35
City of Hong Kong	D. L. Lloyd ...	F. MacLachlan ...	" ...	S.	" ...	Fm. 911 18.11.34 to 17.1.35	21.1.35
028 †† City of London ...	J. G. Brown ...	B. E. Hooper, J. G. G. Fyfe, V. Wilson.	D. Bussell ...	"	" ...	Fms. 911 & 138 9.10.34 to 6.12.34	31.12.34
256 *† City of Lyons ...	H. Johnston ...	J. Stevenson, A. Cran, W. E. Barnett.	S. Lindsay ...	M.	" ...	" " 13.11.34 to 3.1.35	18.1.35
066 †† City of Nagpur...	N. McNeil, O.B.E. ...	E. Walton, F. Revel, W. Gibb.	A. E. Dove ...	S.	" ...	" " 22.10.34 to 31.1.35	27.2.35
074 †† City of Paris ...	H. L. Walton, O.B.E., R.D., Commr. R.N.R.	A. Hamilton, H. Foxon, R. McDougal.	H. Peever ...	"	" ...	" " 12.10.34 to 25.2.35	7.3.35
City of Perth ...	D. H. Metcalf ...	A. M. Westlake, J. Owen, R. F. Henry.	" ...	M.L.	" ...	Fm. 915 14.4.33 to 8.9.33	9.10.33
271 *† City of Roubaix	W. Gray ...	T. L. Vaughan, H. N. Jones, K. MacKenzie.	W. Leuchars ...	M.	" ...	Fms. 911 & 138 11.11.34 to 28.2.35	3.3.35
272 *† City of Singapore	T. Cooper ...	G. T. Mathias, D. Pattison, S. Ayles.	P. Francis ...	"	" ...	" " 18.8.34 to 6.11.34	9.11.34
035 *† City of Sydney ...	E. G. Hoppins ...	S. Brett, P. G. A. King, G. D. Robertson.	L. M. Wishart ...	"	" ...	" " 25.11.34 to 6.2.35	12.2.35
167 *† City of Tokio ...	R. R. Spurring ...	G. R. Jackson ...	W. H. Wilson ...	S.	" ...	" " 11.9.34 to 5.1.35	18.1.35
City of Winchester	G. Burton ...	W. Rogerson, S. M. Cronin, C. Walker.	" ...	"	" ...	Fm. 915 " 13.7.34 to 3.1.35	15.1.35
125 *† City of Windsor	E. E. Bulkeley ...	C. S. Cheyney, J. Midlen, J. Underdown.	S. V. Knight ...	"	" ...	Fms. 911 & 138 6.12.34 to 26.12.34	4.1.35
City of Yokohama	A. V. Radcliffe ...	F. J. R. Roore ...	" ...	"	" ...	Fm. 911 6.11.34 to 14.1.35	4.2.35
027 *† Clan Farquhar ...	R. M. Robertson ...	T. A. Watkinson, J. Browne, G. W. Spiller.	F. Robbie ...	M.	Clan " ...	Fms. 911 & 138 11.9.34 to 7.1.35	15.1.35
050 *† Clan Macalister	F. J. Stenson, R.D., A.D.C., Capt., R.N.R.	H. Duncan, E. E. Arthur ...	E. Harvey ...	S.	" ...	" " 30.7.34 to 16.11.34	27.11.34
241 *† Clan Macbeth ...	H. Andrews ...	H. Whitehead, A. V. Howard, P. N. Colepeper.	A. J. G. Sayer ...	"	" ...	" " 6.9.34 to 27.11.34	17.12.34
222 *† Clan Macdougall, M.V.	L. F. Redford, R.N.R.	D. F. Sutton, E. Jenkin, A. Chisholm.	S. Simpson ...	"	" ...	" " 15.10.34 to 29.12.34	6.2.35
287 *† Clan Macfarlane	W. J. Hughes ...	J. H. Wright, J. R. Moss, E. H. O. Stone, H. J. M. Watkins, C. Rodger.	R. Lowther ...	"	" ...	" " 31.10.34 to 8.1.35	25.2.35
118 *† Clan Macindoe...	H. E. G. Scott-Smith, O.B.E., R.D., R.N.R.	R. Armstrong, B. V. Brown, R. R. Baxter.	W. C. Munro ...	"	" ...	" " 7.9.34 to 10.2.35	3.3.35
082 *† Clan Macnair ...	W. G. Holman ...	H. R. Town, B. H. Magill, E. Coultas.	" ...	"	" ...	Fm. 911 11.11.34 to 1.12.34	6.12.34
255 *† Clan Macneil ...	A. Low ...	J. Dulson, R. G. Bagnall, H. Hind.	A. Haslam ...	"	" ...	Fms. 911 & 138 21.11.34 to 6.2.35	14.2.35
001 *† Clan Macphee ...	A. R. Cossar ...	H. R. Crosscombe, R. D. Helme J. A. Ward.	J. D. Marshall ...	"	" ...	" " 16.11.34 to 12.2.35	23.2.35
168 *† Clan Macquiggart	W. F. West ...	R. K. Phillips, V. Green, J. M. Findlay.	G. L. Brown ...	"	" ...	" " 13.6.34 to 24.10.34	30.10.34
002 *† Clan Macwhirter	T. M. Macfarlane ...	D. H. Brewer ...	D. B. Carstairs...	"	" ...	" " 16.11.34 to 8.2.35	27.2.35
003 *† Clan Malcolm ...	J. Pollock ...	E. Croucher, A. Banks ...	A. P. Goodman	"	" ...	" " 8.10.34 to 24.12.34	2.1.35
283 *† Clan Morrison ...	R. P. Galer, R.D., Commr., R.N.R.	" ...	A. R. Cox ...	"	" ...	" " 19.9.34 to 6.1.35	11.1.35
279 *† Clan Urquhart ...	G. Young ...	J. Millar, W. M. Graham, C. Allister.	A. Butcher ...	M.	" ...	" " 13.12.34 to 14.1.35	18.2.35
Clement	W. Griffiths ...	W. Mendus, F. J. Law, E. Needham.	A. Hastings ...	M.L.	Booth ...	" ...	" ...
041 *† Clydebank M.V.	G. Sutherland ...	A. Stafford-Watts, W. Smith, J. W. Robinson.	J. L. Ryder ...	S.	A. Weir ...	Fms. 911 & 138 26.10.34 to 12.12.34	14.1.35
124 *† Comerie ...	W. Broome ...	C. R. Aitken, L. St. J. French, J. Mackay.	J. Cunningham	"	" ...	" " 11.11.34 to 5.1.35	24.1.35
016 *† Comliebank, M.V.	S. Currie ...	F. D. Shaw ...	" ...	"	" ...	" " 14.9.34 to 18.1.35	6.3.35
185 †† Comorin ...	C. W. Cartwright, D.S.C.	R. L. Bryde, J. H. Roberts, A. L. Cottier.	W. Baldwin ...	M.-S.	P. & O. ...	Fms. 911 & 138 16.12.34 to 8.1.35	25.2.35
198 *† Contractor ...	D. L. Whyte ...	R. H. Barnes, S. Wallis, R. R. L. Rosoman.	T. Todd ...	M.	Harrison ...	" " 5.11.34 to 17.1.35	28.1.35
187 *† Coptic, M.V. ...	D. Christie ...	C. S. Cooke, H. Tee, J. T. Sheffield.	R. V. McCreath	S.	Shaw Savill & Albion.	" " 4.7.34 to 28.10.34	6.11.34
258 †† Corfu ...	F. E. French, R.D., Capt., R.N.R.	A. Shepherd, D. Holden, A. Brown.	" ...	M.-S.	P. & O. ...	" " 8.11.34 to 1.2.35	2.2.35
Cornwall	A. E. Lettington, D.F.C.	B. Maxwell, W. Ireland, H. Offey.	R. V. McCreath	M.L.	Federal ...	Fm. 915 24.9.34 to 26.1.35	21.2.35
006 *† Coronado ...	R. A. Thorburn, R.D., Commr., R.N.R.	J. F. Wallis, A. A. Johnson, A. J. Turner.	R. Oakley ...	S.	Elders & Fyffes	Fm. 911 3.12.34 to 16.2.35	22.2.35
214 *† Counsellor ...	J. Jackson ...	R. Warren, N. A. Thomas, N. A. Blount.	H. Edwin ...	M.	Harrison ...	Fms. 911 & 138 24.9.34 to 12.1.35	18.1.35
036 *† Cumberland ...	T. L. Maltby ...	H. Fitzsimmons, W. Pemberton, F. Bryant.	E. Slater ...	S.	Federal ...	" " 11.7.34 to 12.12.34	18.1.35
285 *† Custodian ...	T. O'Connor ...	J. Marsland, T. A. Robinson, T. Woodward.	L. Rose ...	M.	Harrison ...	" " 15.9.34 to 25.11.34	12.12.34
169 *† Dalgoma ...	P. H. Beeching ...	F. Sherwood, H. F. Richardson, G. A. Pitman.	A. G. Coward ...	"	British India ...	" " 5.11.34 to 16.1.35	22.1.35
Dearne ...	T. H. Woodhead ...	H. E. Cormack ...	" ...	M.L.	Goole Stm.Shipping	Fm. 915 18.8.34 to 26.1.35	4.2.35
Deebank	J. Robertson ...	G. J. Crispin ...	" ...	"	A. Weir ...	" " 23.5.34 to 28.9.34	5.10.34
138 *† Designer ...	W. A. Hansen ...	J. McPhail, — Parker, — Goodman.	H. Raw ...	M.	Harrison ...	Fms. 911 & 138 7.6.34 to 2.7.34	30.7.34
061 *† Devon ...	J. Blencowe ...	H. Philpott, A. Robertson, J. R. Cowell.	R. O. Shaughnessy.	"	British India ...	" " 30.10.34 to 5.12.34	7.1.35
284 *† Director ...	B. Worthington ...	L. C. Hill, R. Walker, H. Kirkwood.	R. Jones ...	"	Harrison ...	" " 6.10.34 to 30.11.34	7.12.34
251 *† R.R.S. Discovery II.	A. L. Nelson ...	J. Barrett, D. D. Bangay, C. W. Leadbetter.	H. Morriss ...	M.L.	Falkland Is. Govt.	Fm. 915 1.8.34 to 24.11.34	14.1.35
221 *† Domala M.V. ...	H. T. Cooke ...	" ...	W. Dawson ...	M.	British India ...	Fm. 912 12.8.34 to 7.11.34	14.1.35
						Fms. 911 & 138 9.12.34 to 2.3.35	7.3.35



Name of Vessel.	Captain.	Observing Officers.	Senior Wireless Operator.	Meteorological Instrument Equipment.	Line.	Logs, Registers, or Records Contributed. 2.12.34 to 7.3.35.	Date Last Return Received.
136 *† <i>Doric Star</i> ...	S. N. Capon ...	J. L. Dawson, C. H. Watson, E. A. Irvine.	L. F. Reed ...	M.	Blue Star ...	Fms. 911 & 138 31.8.34 to 10.12.34	17.12.34
058 *† <i>Dorset</i> , M.V. ...	F. Ashworth ...	...	...	...	Federal ...	...	...
142 †† <i>Duchess of Atholl</i> ...	A. H. Hall ...	C. E. Duggan, E. V. Glennie, R. Walgate.	E. Murphy ...	M.-S.	Canadian Pacific	Fms. 911 & 138 2.12.34 to 18.1.35	22.1.35
152 †† <i>Duchess of Bedford</i> ...	G. R. Parry, R.D., Commr., R.N.R.	L. Outram, E. J. Oatridge, W. Stanley.	W. G. Sutherland	"	"	Fm. 912 " 17.11.34 to 22.2.35	25.2.35
151 †† <i>Duchess of Richmond</i> ...	A. Rothwell ...	A. Mansey, W. P. P. Phillips, N. Scallan.	F. Yoston ...	S.	"	Fms. 911 & 138 11.1.34 to 18.12.34	27.12.34
143 †† <i>Duchess of York</i> ...	W. B. Coyle, R.D., Commr., R.N.R.	C. D. Watt, J. Stewart, A. Mackie.	J. W. Potts ...	M.-S.	"	" 25.11.34 to 8.2.35	19.2.35
<i>Duke of Argyll</i> ...	J. W. Richmond ...	F. Ardern ...	...	S.	L.M.S. Railway...	Telegraphic Report...	...
<i>Duke of Lancaster</i> ...	H. A. Tulley ...	N. Abraham ...	...	"	"	"	...
<i>Duke of Rothesay</i> ...	F. C. Raven ...	J. Irwin ...	...	"	"	"	...
253 *† <i>Dumana</i> , M.V....	H. T. Hudson, R.D., Commr., R.N.R.	W. M. Bain, A. H. Usher, L. O. Harbrow.	H. Soulsby ...	M.	British India ...	Fms. 911 & 138 16.11.34 to 23.1.35	14.2.35
098 †† <i>Dunbar Castle</i> , M.V.	A. H. Blackman ...	L. H. Farrow, D. McKenzie	P. P. Williams...	S.	Union Castle ...	" 25.11.34 to 28.1.35	2.2.35
052 *† <i>Dunster Grange</i> , M.V.	G. F. Wilson ...	E. G. Raynor, R. G. Williams, E. Monckton.	J. C. Mann ...	M.	Houlder ...	" 3.12.34 to 23.1.35	29.1.35
102 *† <i>Duquesa</i> ...	C. R. Frost ...	A. McEwan, R. F. Martin, D. Murray.	H. Croker ...	"	Furness Withy ...	" 16.9.34 to 14.11.34	19.11.34
215 *† <i>Durenda</i> , M.V....	A. A. Parker ...	J. W. Douglas, R. A. H. Bond, F. Downer.	B. Vincent ...	"	British India ...	" 15.11.34 to 31.1.35	3.3.35
064 *† <i>Durham</i> , M.V. ...	H. L. Upton, D.S.C., R.D., Capt., R.N.R.	C. J. P. Guille, A. W. Marshall, H. C. R. Bell.	M. H. Savage ...	"	Federal ...	" 16.10.34 to 20.1.35	30.1.35
<i>Eastern Coast</i> ...	W. Quirk ...	F. Dawson, F. Darby ...	...	M.L.	Coast Lines ...	Fm. 915 23.7.34 to 18.12.34	7.1.35
077 †† <i>Edinburgh Castle</i> ...	C. N. Bickford ...	M. S. Hodson ...	A. G. Blow ...	S.	Union Castle ...	Fms. 911 & 138 8.12.34 to 27.1.35	29.1.35
107 *† <i>El Argentino</i> , M.V.	F. Ellis, D.S.C. ...	G. Brighton, H. N. Sherwell, L. P. Owen.	R. Bell ...	M.	Houlder ...	" 17.12.34 to 18.2.35	22.2.35
009 *† <i>Elmworth</i> , M.V.	A. W. Gofton ...	L. Lidguard, P. McFarlane, A. H. Compton.	L. Cushion ...	"	R. S. Dalgleish ...	" 16.10.34 to 25.11.34	3.12.34
109 *† <i>El Paraguay</i> ...	R. Owen ...	J. Knight, R. L. Aldridge ...	J. Hunt ...	"	Houlder ...	" 12.11.34 to 11.1.35	21.1.35
108 *† <i>Elstree Grange</i> ...	S. Mathews ...	C. Feaver, W. F. Heritage ...	A. E. George ...	"	"	" 29.8.34 to 20.10.34	7.11.34
110 *† <i>El Uruguayo</i> ...	T. McNamara ...	F. E. Halstone ...	W. Hughes ...	"	"	" 24.12.34 to 20.2.35	27.2.35
088 *† <i>Empire Star</i> ...	G. Owen, R.D., Commr., R.N.R.	J. L. Dawson, F. W. B. Gaubert, J. N. Wilson.	A. H. Walley ...	S.	Blue Star ...	" 21.11.33 to 18.2.34	9.3.34
193 †† <i>Empress of Australia</i> ...	E. Griffith, R.N.R. ...	O. F. Pennington, S. Keay, A. Tippet.	J. Butler ...	"	Canadian Pacific	" 9.1.35 to 8.2.35	28.2.35
034 †† <i>Empress of Britain</i> ...	R. N. Stuart, V.C., D.S.O., R.D., Commr. R.N.R.	D. Dunn, A. C. Harrison, N. Duck.	F. W. Bradley ...	"	"	" 16.12.34 to 16.1.35	28.1.35
154 †† <i>Empress of Canada</i> ...	W. T. Kinley ...	T. Macduff, J. Evelyn, F. Poole.	J. Haegest ...	M.L.	"	Fm. 915 24.8.34 to 12.12.34	16.1.35
153 †† <i>Empress of Japan</i> ...	A. J. Hailey, R.N.R....	T. Macduff, J. S. Clarke, G. W. R. Graves.	J. MacLure ...	"	"	" 27.7.34 to 14.11.34	27.12.34
134 *† <i>Esperance Bay</i> ...	L. D. Douglas, R.D., R.N.R.	A. Bluett, A. E. Smith, F. L. Kean.	A. Stander ...	M.	Aberdeen Commonwealth. Scottish Fishery Board.	Fms. 911 & 138 12.10.34 to 11.1.35	15.1.35
<i>Explorer</i> , F.R.S.	R. McKenzie ...	...	...	M.L.	Shaw Savill ...	Fm. 915 23.7.34 to 11.11.34	16.11.34
<i>Fordsdale</i> ...	F. G. Fraser ...	...	...	"	A. Weir ...	Fms. 911 & 138 8.10.34 to 20.1.35	6.2.35
239 *† <i>Foytebank</i> , M.V.	J. Avern, Commr., R.N.R.	L. B. Miller, D. Ashley-Emile, J. Tillatt.	...	S.	Cunard White Star	" 31.12.34 to 7.1.35	18.1.35
046 †† <i>Franconia</i> ...	C. D. Logie ...	H. Ingledew, R. N. Wilkie, J. MacCallum.	J. McAlease ...	"	Reardon Smith ...	" 4.9.34 to 12.1.35	24.1.35
159 *† <i>Fresno City</i> , M.V.	A. T. Brown, R.D., Capt., R.N.R.	P. O. Davis, W. Tanner, N. Kingscote.	R. A. J. Owlett...	"	Cunard White Star	" 10.12.34 to 1.2.35	15.2.35
186 †† <i>Georgic</i> , M.V. ...	B. D. Thomas ...	R. W. Davies, P. J. Ryan, C. S. Whitticcombe.	T. C. Morrison...	"	A. Holt ...	Fm. 915 13.6.34 to 27.10.34	8.12.34
234 *† <i>Glaucus</i> ...	J. C. Townley, R.D., Capt., R.N.R.	J. B. Jones, B. Harrison, H. Walker.	H. S. Reid ...	"	A. Weir ...	Fms. 911 & 138 26.8.34 to 11.1.35	19.2.35
026 *† <i>Glenbank</i> , M.V.	W. B. Ewan ...	T. R. Walker, O. Thomas, J. Evans.	A. Johnson ...	M.L.	"	" 8.10.34 to 19.1.35	30.1.35
126 *† <i>Glengarry</i> , M.V.	H. D. Blamey... E. N. K. Blackmore ...	W. McBean, C. Sherwood, L. Thorne.	W. Williamson...	S.	Harrison ...	" 23.9.34 to 8.12.34	13.12.34
085 *† <i>Governor</i> ...	J. Angier ...	S. W. Bell, P. G. Neill, H. K. Martin.	H. H. Ridgeway	M.	Houlder ...	" 23.9.34 to 27.11.34	4.12.34
111 *† <i>Hardwicke Grange</i> ...	J. Davidson ...	A. Watson, G. Greaves ...	I. Howard ...	"	R. P. Houston ...	" 3.12.34 to 9.1.35	4.2.35
218 *† <i>Harmonides</i> ...	W. H. Fowler ...	A. O. Seybold, W. L. Baker, H. S. Powell.	F. Robertson ...	"	Union S.S. Co., N.Z.	Fm. 915 7.9.34 to 17.12.34	20.2.35
262 *† <i>Hauraki</i> , M.V.	F. R. Elwell ...	M. H. Gerrey, C. Hare, L. C. Higgins.	W. S. Armstrong	S.	Federal ...	" 13.8.34 to 10.12.34	18.12.34
<i>Hertford</i> ...	E. Harris ...	W. E. Jones, W. McGarry, T. Stevenson.	L. Trenn ...	M.L.	L.M. & S. Railway	Telegraphic Report 23.2.35	23.2.35
<i>Hibernia</i> ...	J. Burton Davies ...	M. Willmott ...	...	S.	Royal Mail ...	Fms. 911 & 138 30.11.34 to 10.1.35	18.1.35
182 †† <i>Highland Brigade</i> , M.V.	J. R. Bulmer ...	J. Hughes ...	...	M.-S.	"	" 1.11.34 to 23.2.35	3.3.35
116 †† <i>Highland Chieftain</i> , M.V.	C. A. Cocks, D.S.C., R.D., Capt., R.N.R.	W. Wrake, S. Woolley, R. J. Finch.	A. Reynolds ...	"	"	" 15.10.34 to 12.2.35	18.2.35
099 †† <i>Highland Monarch</i> , M.V.	J. A. Hodges ...	J. Smith, G. S. Grant, G. Leach.	J. Malcolm ...	"	"	" 13.12.34 to 27.1.35	6.2.35
230 †† <i>Highland Patriot</i> , M.V.	R. G. Clayton, D.S.C., R.D., Capt., R.N.R.	R. N. Fletcher, T. Bolland, N. F. Seaton.	E. F. Weatherhead.	"	"	" 15.11.34 to 29.12.34	7.1.35
250 †† <i>Highland Princess</i> , M.V.	R. A. Robinson ...	P. Yeatman, W. Tennant, C. Webster.	N. Carpenter ...	"	"	" 30.8.34 to 2.12.34	17.12.34
075 *† <i>Hobson's Bay</i> ...	O. V. Schlanbusch ...	F. E. C. Cox, H. Davies, J. C. Blake.	G. A. Tee ...	"	Aberdeen Commonwealth. Cunard White Star	" 22.12.34 to 4.1.35	7.1.35
060 †† <i>Homeric</i> ... ...	T. V. Roberts, R.D., Commr., R.N.R.	F. Charnley, C. Hollyoak, W. Williams.	A. R. Porter ...	M.	Federal ...	" 9.8.34 to 15.9.34	1.10.34
261 *† <i>Huntingdon</i> ...	W. S. Quinn ...	J. Thompson, H. McCormick, H. Morgan.	L. B. Cleary ...	S.	Harrison ...	" 4.11.34 to 25.1.35	30.1.35
200 *† <i>Huntsman</i> ...	H. G. B. Field ...	C. Cremin, C. W. Roberts, E. R. Rae.	A. R. Mugridge	"	New Zealand Shipping. Harrison	Fms. 911 & 138 11.11.34 to 19.2.35	23.2.35
<i>Hurumi</i> ...	A. H. Brown ...	C. P. Vaughan, D. H. Bryant, A. S. Milne.	T. Foster ...	M.	"	Fm. 911 7.1.35 to 18.1.35	22.1.35
260 *† <i>Inanda</i> ...	F. C. Pretty, D.S.C. ...	...	...	S.	A. Weir ...	Fms. 911 & 138 16.11.34 to 9.1.35	4.2.35
<i>Ingoma</i> ...	W. H. Gibbings ...	T. E. Steele, W. S. Eustance, D. N. Penfold.	E. J. Cook ...	M.	...	...	...
144 *† <i>Inverbank</i> , M.V.	J. T. Ling ...	N. G. Skelly ...	...	"	...	...	...



## FLEET LIST

V

Name of Vessel.	Captain.	Observing Officers.	Senior Wireless Operator.	Meteoro-logical Instrument Equip-ment.	Line.	Logs, Registers, or Records Contributed. 2.12.34 to 7.3.35.	Date Last Return Received.
189 †† <i>Ionic</i> ...	W. H. P. Jackson ...	L. Bull, H. Last, D. Hewett...	S. A. Sorrell ...	S.	Shaw, Savill & Albion	Fms. 911 & 138 7.10.34 to 15.1.35	30.1.35
<i>Isle of Guernsey</i> ...	C. D. Keene ...	— Breuilly ...	...	"	Southern Rly. ...	Telegraphic Report 6.3.35	6.2.35
<i>Isle of Jersey</i> ...	F. W. Holt, M.B.E. ...	— Darley ...	...	"	" " "	" " 27.2.35	27.2.35
<i>Ixion</i> ...	C. J. Watson ...	B. Kelly, J. D. Auld, H. H. Sanderson.	...	M.L.	A. Holt ...	Fm. 915 4.10.34 to 25.12.34	6.2.35
226 *† <i>Japanese Prince</i> , M.V.	{ J. Smith ... E. E. Jones ...	W. M. Henry, J. H. King, L. W. Cooper.	J. Everitt ...	"	Prince ...	" 27.7.34 to 24.11.34	9.1.35
188 †† <i>Kaiser-i-Hind</i> ...	W. A. Cotching ...	A. E. Clay, H. Williamson, H. N. Thompson.	E. Habicht ...	M.-S.	P. & O. ...	Fms. 911 & 138 24.11.34 to 16.2.35	6.3.35
206 *† <i>Karama</i> , M.V....	E. Davies ...	W. A. Rodgers, W. Hill, R. J. McKenzie.	A. Shatton ...	S.	Shaw Savill & Albion.	" " 11.11.34 to 27.2.35	7.3.35
281 *† <i>Kemmendine</i> ...	R. B. Reid ...	C. R. Roy ...	...	M.	Henderson ...	Fm. 911 17.10.34 to 19.12.34	27.12.34
147 †† <i>Laconia</i> ...	B. B. Oram, R.D., Commr., R.N.R.	J. Ashcroft, J. C. Boyce, E. W. Connell.	W. M. McArdle...	S.	Cunard White Star	Fms. 911 & 138 12.11.34 to 2.2.35	6.2.35
062 †† <i>Lancastria</i> ...	G. R. Dolphin, R.D., Commr. R.N.R.	J. McKie, J. Caunce, S. St. G. Toyne.	R. M. Shore ...	"	" " "	" " 19.11.34 to 8.12.34	11.12.34
076 *† <i>Largs Bay</i> ...	W. M. Jermyn ...	C. Meyer ...	...	M.	Aberdeen Commonwealth.	" " 20.7.34 to 23.10.34	30.10.34
112 *† <i>La Rosarina</i> ...	W. E. Williams ...	W. S. Hamblin, T. C. Townsend, S. W. Howell.	W. R. Bain ...	"	Houlder ...	" " 27.10.34 to 3.1.35	7.1.35
267 *† <i>Lassell</i> , M.V. ...	E. Wilkinson ...	W. Bevin, T. J. Sweeney, B. S. Harkney.	L. Brazill ...	S.	Lamport & Holt	" " 13.11.34 to 31.1.35	6.2.35
083 *† <i>Lautaro</i> , M.V. ...	F. D. Cox ...	J. Williams, A. Turner ...	W. House ...	M.	Pacific S.N. Co....	" " 6.10.34 to 31.1.35	6.2.35
<i>Levernbank</i> , M.V.	W. W. Elliott ...	R. E. Sadler ...	...	S.	A. Weir ...	Fm. 911 16.12.34 to 30.12.34	2.2.35
254 *† <i>Limerick</i> , M.V....	A. J. Angell ...	W. H. Timberlake, J. Smallwood, J. E. Clarke.	J. Gillespie ...	M.	Federal ...	Fms. 911 & 138 11.2.34 to 11.6.34	5.7.34
093 *† <i>Llandaff Castle</i> ...	H. L. Scholefield ...	W. E. Clark ...	G. Lewis ...	S.	Union Castle ...	" " 30.11.34 to 1.2.35	11.2.35
094 *† <i>Llandovery Castle</i> , Commr., R.N.R.	J. MacMahon, R.D., Commr., R.N.R.	A. G. Bidwell, J. Sowden ...	A. E. Hunter ...	"	" " "	" " 3.11.34 to 5.1.35	14.1.35
097 †† <i>Llangibby Castle</i> , M.V.	H. R. Northwood ...	W. Andrews ...	J. Gilbert ...	"	" " "	" " 6.10.34 to 1.3.35	6.3.35
216 *† <i>Llanstephan Castle</i>	W. Weller ...	T. H. Watley, A. Cambridge	H. W. Langshaw	"	" " "	" " 1.10.34 to 6.12.34	4.1.35
084 *† <i>Lobos</i> , M.V. ...	E. H. Large, R.D., Commr., R.N.R.	D. I. Jones, J. Murdoch ...	R. Brownlee ...	M.	Pacific S.N. Co....	" " 17.9.34 to 17.12.34	27.12.34
137 *† <i>Logician</i> ...	R. J. Herschel ...	T. W. Kent, F. R. Hickin ...	H. W. Quinn ...	"	Harrison ...	" " 9.12.34 to 28.2.35	6.3.35
008 *† <i>Losada</i> , M.V. ...	R. E. Dunn, O.B.E. ...	A. Lyall ...	A. Fairweather	"	Pacific S.N. Co....	" " 19.7.34 to 28.10.34	2.11.34
232 *† <i>Madura</i> ...	J. A. Wright ...	T. N. Salmon, K. R. C. Letts, R. A. Bidmead.	H. O. Francis ...	"	British India ...	" " 30.9.34 to 12.12.34	2.1.35
231 *† <i>Mahana</i> ...	J. M. Cameron...	C. C. Good, J. Paine, A. Turnbull.	— Jackson ...	S.	Shaw Savill & Albion.	" " 10.10.34 to 4.1.35	11.2.35
101 *† <i>Mahia</i> ...	C. M. Andrews...	R. A. Costa, R. K. Bolton, E. L. Harper.	C. H. Lott ...	"	" " "	" " 25.9.34 to 26.1.35	4.2.35
140 *† <i>Mahratta</i> ...	W. Hill ...	N. B. Exley, N. Grayson, W. Couling.	P. F. Dunford...	M.	Brocklebank ...	" " 14.11.34 to 5.12.34	10.12.34
014 *† <i>Mahronda</i> ...	L. T. Owen ...	J. B. Leigh, J. B. Newman, H. Hains.	...	"	" " "	" " 24.10.34 to 30.11.34	11.12.34
242 *† <i>Mahseer</i> ...	T. A. Tyson ...	H. Dart, J. Robertson, J. W. Robertson.	J. Caddy ...	"	" " "	" " 6.11.34 to 6.12.34	7.1.35
015 *† <i>Mahsud</i> ...	R. W. Kershaw ...	H. Gillespie, J. R. Paisley, C. A. Jackson.	G. D. Plant ...	"	" " "	" " 17.12.34 to 21.1.35	28.2.35
042 *† <i>Maimoa</i> ...	H. P. Thurston ...	J. A. McNab, A. Turnbull, A. S. Anthes.	R. Small ...	S.	Shaw Savill & Albion.	" " 14.3.34 to 9.7.34	18.7.34
054 †† <i>Majestic</i> ...	R. B. Irving, O.B.E. R.D., Capt., R.N.R.	R. B. O'Brien, J. P. Evans, A. H. Young.	J. R. Thomson...	"	Cunard White Star	" " 6.12.34 to 16.1.35	18.1.35
018 *† <i>Makalla</i> ...	C. Shaw ...	J. Richardson, A. Hill, G. Thomas, A. G. Gorham.	W. Fallowfield	M.	Brocklebank ...	" " 3.11.34 to 31.1.35	25.2.35
225 *† <i>Makura</i> ...	D. MacDonald ...	F. Young, D. H. Richards, B. H. Young.	R. Gough ...	M.L.	Canadian-Australasian	Fm. 915 5.7.34 to 19.10.34	3.1.35
236 *† <i>Malayan Prince</i> M.V.	E. Hardcastle ...	C. S. Smith, W. R. Harries, C. J. H. Dunford.	A. A. Lees ...	"	Prince ...	" 21.9.34 to 5.1.35	28.2.35
219 *† <i>Malda</i> ...	F. Caffyn ...	V. R. Christmas, A. W. Willis, D. O. Gough.	— Sturdie ...	M.	British India ...	Fms. 911 & 138 26.8.34 to 22.11.34	4.12.34
195 †† <i>Maloja</i> ...	J. B. Browning, R.D., Commr., R.N.R.	K. W. Richardson, P. Howarth, H. M. Askin.	A. Macbeth ...	M.-S.	P. & O. ...	" " 17.11.34 to 21.2.35	25.2.35
<i>Mamari</i> ...	W. B. Starr, R.D., Commr., R.N.R.	R. M. Pattinson ...	...	M.L.	Shaw Savill & Albion.	... ..	...
146 *† <i>Mandasor</i> ...	L. C. Shore ...	G. C. Cullen, A. Horspool, E. Williams.	D. Jones ...	M.	Brocklebank ...	" " 27.10.34 to 26.1.35	18.2.35
177 *† <i>Mantola</i> ...	D. F. James ...	J. Duncan, L. J. Kew, G. Challis.	S. K. Olston ...	"	British India ...	" " 21.11.34 to 5.2.35	14.2.35
197 †† <i>Mantua</i> ...	J. M. Legg ...	J. Paice, N. W. Leach, W. Jolliffe.	J. Downie ...	M.-S.	P. & O. ...	" " 1.12.34 to 19.12.34	7.1.35
<i>Maron</i> , M.V. ...	J. A. Stewart ...	M. Turner, J. Holden, J. McCarthy.	...	M.L.	A. Holt ...	Fm. 915 12.4.34 to 8.9.34	16.10.34
104 *† <i>Marquesa</i> ...	R. Smiles ...	J. Allerton, F. Feint, G. Jennings.	H. A. Watton ...	M.	Furness Houlder	Fms. 911 & 138 21.10.34 to 26.12.34	31.12.34
213 †† <i>Mashobra</i> ...	J. L. Beatty ...	L. C. Martin, H. Stadden, K. W. Letbe.	W. Hughes ...	M.-S.	British India ...	" " 16.10.34 to 30.12.34	4.2.35
217 *† <i>Matakana</i> ...	F. A. Orriss ...	W. A. Sims-Reeves, H. Howe, D. Masters.	N. Kinder ...	S.	Shaw Savill & Albion.	" " 17.6.34 to 13.10.34	24.10.34
235 †† <i>Mataroa</i> ...	A. McIntosh ...	E. B. Macfarren, R. S. Winder, C. A. Parsloe.	J. P. Carey ...	"	" " "	" " 4.11.34 to 6.2.35	12.2.35
023 *† <i>Matheran</i> ...	H. D. Fulcher ...	F. C. Madden, R. Penston, T. Johnston.	J. Heathcote ...	M.	Brocklebank ...	" " 16.11.34 to 20.1.35	23.1.35
223 *† <i>Matiana</i> ...	L. D. Patterson ...	A. H. Baird, J. Bridgeman, V. Irving.	F. Arnott ...	"	British India ...	" " 25.10.34 to 13.1.35	11.2.35
024 *† <i>Matra</i> ...	N. P. Cornish ...	A. E. Austin, T. F. Eggleston, C. Parry.	E. R. Copps ...	"	Brocklebank ...	" " 30.7.34 to 24.10.34	2.11.34



Name of Vessel.	Captain.	Observing Officers.	Senior Wireless Operator.	Meteorological Instrument Equipment.	Line.	Logs, Registers, or Records Contributed. 2.12.34 to 7.3.35.	Date Last Return Received.
278 *† <i>Middlesex</i> ...	H. T. Wilde ...	E. G. Williams, C. Coraran, H. I. Phillips.	J. McCarthy ...	S.	Federal ...	Fms. 911 & 138 30.1.34 to 19.4.34	27.6.34
194 †† <i>Moldavia</i> ...	C. H. C. Allin ...	H. Toon, W. Alexander, R. Perry.	J. W. Quain ...	M.-S.	P. & O. ...	" " 4.10.34 to 12.12.34	15.12.34
199 †† <i>Mongolia</i> ...	H. R. Rhodes ...	H. M. Flint, G. Aspinall, T. Hopkins.	A. Morris ...	"	" ...	" " 11.8.34 to 14.11.34	21.11.34
148 †† <i>Montcalm</i> ...	H. A. Moore, R.D., Commr., R.N.R.	F. W. Roberts, D. Ewing ...	J. Biggins ...	"	Canadian Pacific	" " 13.1.35 to 2.3.35	6.3.35
149 †† <i>Montclare</i> ...	A. H. Hall ...	J. Soame, W. Thorburn, R. Burns.	H. A. Bowman ...	"	" " }	Fm. 912 " 27.1.35 to 15.2.35	23.2.35
150 †† <i>Montrose</i> ...	M. F. Murray, R.D., Commr., R.N.R.	W. J. Roberts, E. F. Aikman	W. Paris ...	"	" " }	Fms. 911 & 138 11.11.34 to 26.1.35	2.2.35
164 †† <i>Mooltan</i> ...	E. P. Lyndon, R.D., R.N.R.	J. M. Sinclair, A. D. Dennis, M. A. Trenfield.	H. Cheese ...	"	P. & O. ...	Fms. 911 & 138 26.8.34 to 29.11.34	3.12.34
196 †† <i>Mulbera</i> ...	W. A. Grant-Pyves ...	P. M. Wilson, A. M. Dean, J. L. Williams.	W. C. Kerr ...	"	British India ...	" " 12.10.34 to 31.1.35	18.2.35
078 *† <i>Myrtlebank</i> , M.V.	G. S. Holbrook ...	J. Syme, W. T. Norvell, C. Smith.	F. Markham ...	S.	A. Weir ...	" " 23.11.34 to 6.1.35	12.2.35
073 *† <i>Nagara</i> ...	B. J. Davis ...	F. Fraser, J. L. Smith, J. C. Scott.	E. G. Blackburn ...	M.	Royal Mail ...	" " 4.12.34 to 1.2.35	6.2.35
201 †† <i>Naldera</i> ...	R. C. Dene ...	E. J. R. North, F. W. J. Pearce, E. R. Physick.	R. T. Soans ...	S.	P. & O. ...	" " 26.11.34 to 29.2.35	6.3.35
<i>Nankin</i> ...	N. B. Skinner ...	G. D. Clarke, J. H. Simpson, B. S. Johnson	" ...	M.L.	Eastern and Australian.	Fm. 915 1.8.34 to 21.10.34	1.1.35
227 *† <i>Nardana</i> ...	C. Dorking White ...	H. Goater, W. Clarke, R. G. Mulhallen.	R. Rawcliffe ...	M.	British India ...	Fms. 911 & 138 2.6.34 to 23.10.34	8.11.34
202 †† <i>Narkunda</i> ...	F. Sudell, R.D., Commr., R.N.R.	W. N. Eade, H. C. Slinn, G. Randall.	C. Herbert ...	M.-S.	P. & O. ...	" " 23.9.34 to 27.12.34	31.12.34
<i>Nascopie</i> ...	T. F. Smellie ...	A. J. Randall, R. Stephen.	" ...	S.	Hudson's Bay Co.	Fm. 911 8.7.34 to 30.9.34	19.10.34
286 *† <i>Natia</i> ...	E. W. Bridges ...	H. A. Wight, F. S. Devison...	G. A. Warcing ...	M.	Royal Mail ...	Fms. 911 & 138 7.10.34 to 28.11.34	3.12.34
<i>Nellore</i> ...	C. H. G. Lorriard, M.C.	A. G. Rose, H. E. Nuzum, J. H. Armstrong.	" ...	M.L.	Eastern and Australian.	Fm. 915 30.8.34 to 25.11.34	15.2.35
019 *† <i>Nerbudda</i> ...	J. Blencowe ...	K. H. Goodman, H. C. Turner, B. C. Brooking.	R. O'Shaughnessy.	M.	British India ...	Fms. 911 & 138 31.7.34 to 23.9.34	26.9.34
162 *† <i>Nestor</i> ...	F. Adecock ...	R. W. Aitken, H. Readshaw, P. S. Evans.	C. F. Townsend ...	S.	A. Holt ...	" " 2.11.34 to 6.1.35	12.2.35
210 *† <i>Niagara</i> ...	T. V. Hill ...	G. H. Kime, J. Billingham, D. A. Menlove.	G. M. Power ...	M.L.	Canadian-Australasian.	Fm. 915 24.5.34 to 4.10.34	3.1.35
<i>Norfolk</i> ...	W. Martin ...	H. L. Wilkinson, T. Windus, R.N.R.	" ...	"	Federal ...	" 5.9.34 to 5.2.35	15.2.35
<i>Northern Coast</i> ...	R. L. H. McNish, D.S.O., R.N.R.	P. A. Block.	" ...	"	Coast Lines ...	" 31.8.34 to 4.2.35	11.2.35
<i>Northumberland</i> ...	H. Cameron ...	H. J. Cowan, H. F. Thomson	" ...	"	Federal ...	" 24.3.34 to 20.7.34	24.7.34
<i>Northumberland</i> ...	A. E. Lettington ...	J. Marshall, D. Lyver, H. S. Cashmore.	" ...	"	"	"	"
004 †† <i>Olympic</i> ...	R. V. Peel, R.D., Commr. R.N.R.	H. S. Law, S. A. Jones, I. Anson.	F. Clark ...	S.	Cunard	Fms. 911 & 138 23.11.34 to 28.2.35	2.3.35
243 *† <i>Opawa</i> , M.V.	F. W. Robinson ...	J. McCulloch, J. C. Grose, H. S. Dawson.	F. W. Fowler ...	M.	White Star New Zealand Shipping.	" " 12.6.34 to 11.10.34	17.10.34
170 †† <i>Orama</i> ...	E. P. Cameron, R.D., Capt., R.N.R.	J. W. Mackay, A. Addison, L. W. Hodges.	J. W. Wilson ...	S.	Orient ...	" " 30.10.34 to 29.1.35	18.2.35
080 *† <i>Orari</i> ...	J. G. Almond ...	H. S. Rogers, A. T. H. Weatherall, J. H. Underwood.	W. E. Fordham ...	M.	New Zealand Shipping.	" " 11.11.34 to 23.2.35	28.2.35
246 †† <i>Orbita</i> ...	M. Galloway ...	F. Parish, H. Litherland, J. Whitehouse.	S. Mitchell ...	M.-S.	Pacific S.N. Co.	" " 12.12.34 to 13.2.35	22.2.35
087 †† <i>Orduna</i> ...	A. Ridyard, O.B.E. ...	R. D. Eckford, W. Vickers, T. R. Thomas.	M. J. Campbell ...	"	" "	" " 30.9.34 to 13.2.35	2.3.35
171 †† <i>Orford</i> ...	A. L. Owens, R.D., Capt., R.N.R.	K. M. Morrison, P. Sargent, W. H. Barker.	A. F. Edwards ...	"	Orient ...	" " 17.9.34 to 18.12.34	22.12.34
174 †† <i>Ormonde</i> ...	M. J. Sarson ...	C. E. Coles, J. M. Swanson, F. Sly.	B. Baxter ...	S.	" ...	" " 20.8.34 to 20.11.34	3.12.34
172 †† <i>Oronsay</i> ...	C. G. Matheson, D.S.O., R.D., Commr., R.N.R.	G. B. H. Jones, G. W. Pinckney, J. N. Hulm.	P. Darby ...	"	" ...	" " 12.11.34 to 13.2.35	20.2.35
173 †† <i>Orontes</i> ...	R. L. F. Hubbard, R.D., Commr., R.N.R.	R. W. Roberts, C. Denton, J. K. Johnson.	S. G. Boon ...	M.-S.	" ...	" " 30.9.34 to 1.1.35	9.1.35
105 †† <i>Orsova</i> ...	G. G. Thorne, R.D., Capt., R.N.R.	F. K. Manley, W. N. Smith, R. B. Stannard.	R. B. Knights ...	S.	" ...	" " 27.5.34 to 29.8.34	7.9.34
156 †† <i>Otranto</i> ...	L. V. James, D.S.C. ...	J. Birch, G. R. Grandage, L. L. Lloyd Jones.	H. R. Cheese ...	M.-S.	" ...	" " 2.9.34 to 4.12.34	15.12.34
044 *† <i>Pacific Exporter</i> , M.V.	C. E. Holland, Commr., R.N.R.	H. Edmonds, H. Moss, W. Willcock.	C. North ...	S.	Furness Withy ...	" " 31.10.34 to 23.1.35	31.1.35
277 *† <i>Pakeha</i> ...	E. T. Grayston, D.S.C., R.D., Commr. R.N.R.	T. H. Davies, C. A. Knox, B. D. Atkin.	T. J. A. Tynan ...	"	Shaw Savill & Albion.	" " 5.8.34 to 13.11.34	23.11.34
<i>Paris</i> ...	C. Manton ...	E. W. Smith ...	A. H. Jones ...	M.L.	Southern Rly. ...	Telegraphic Report... 7.3.35	7.3.35
<i>Penola</i> , Schooner	R. E. D. Ryder, Lieut., R.N.	" ...	" ...	"	British Graham Land Expedition.	" ...	" ...
204 *† <i>Peshawar</i> ...	E. P. Parfitt ...	H. S. Allen, S. Kerridge, H. Anderson.	A. H. Garbett ...	M.	P. & O. ...	Fms. 911 & 138 29.11.34 to 9.1.35	18.1.35
040 *† <i>Port Adelaide</i> ...	R. Williams ...	E. G. Jones, W. E. Dingle, G. Puttick.	H. G. Cowan ...	S.	Commonwealth & Dominion.	" " 26.6.34 to 23.10.34	3.11.34
238 *† <i>Port Alma</i> , M.V.	S. C. Cottell ...	T. L. Kidwell, W. B. Hopkins, A. L. Walton.	R. Tuck ...	"	" " "	" " 14.6.34 to 13.10.34	24.10.34
128 *† <i>Port Auckland</i> ...	C. A. Robinson ...	W. Easton, A. Brown, P. Bradnee.	W. Cummings ...	"	" " "	" " 26.7.34 to 24.11.34	18.12.34
268 *† <i>Port Bowen</i> ...	A. H. Brown ...	W. Craig, R. Bettess, A. V. C. Hoadley.	J. Nolan ...	"	" " "	" " 26.7.34 to 26.11.34	18.12.34
130 *† <i>Port Caroline</i> ...	G. S. Hall ...	S. R. Gorman ...	N. H. Rutter ...	"	" " "	" " 5.10.34 to 12.1.35	13.2.35
190 *† <i>Port Chalmers</i> , M.V.	S. W. Hayter ...	C. R. Townsend, H. A. Munday, C. V. Hancock.	R. Faulkner ...	"	" " "	" " 1.11.34 to 25.2.35	6.3.35
131 *† <i>Port Darwin</i> ...	J. J. Hudson ...	F. J. Lavers, C. Gorley, W. Wakefield.	H. MacLaren ...	"	" " "	" " 20.9.34 to 21.1.35	11.2.35
072 *† <i>Port Denison</i> ...	S. A. E. Gregory ...	E. Wheeler, B. Millburn, A. G. Russell.	V. T. Cole ...	"	" " "	" " 6.9.34 to 25.12.34	3.1.35
<i>Port Dunedin</i> , M.V.	G. W. Hearn ...	L. C. Asser, E. C. Read, L. B. Philpott.	W. J. Craig ...	S.	" " "	Fm. 915 3.9.34 to 17.12.34	20.12.34



## FLEET LIST

vii

Name of Vessel.	Captain.	Observing Officers.	Senior Wireless Operator.	Meteorological Instrument Equipment.	Line.	Logs, Registers, or Records Contributed. 2.12.34 to 7.3.35.	Date Last Return Received.
010 *† Port Fremantle, M.V.	W. J. Enright, R.D., Commr., R.N.R.	A. Young, N. Nuzzell, G. Garner.	H. Lothian ...	S.	Commonwealth & Dominion	Fms. 911 & 138 26.8.34 to 20.10.34	30.1.35
163 *† Port Gisborne, M.V.	W. G. Higgs ...	R. B. Linklater, D. Watson, A. McClounan.	... ..	"	" " "	Fm. 915 13.7.34 to 20.10.34	29.10.34
252 *† Port Hardy ...	J. Jack ...	D. F. Morgan, J. G. Thorn, W. D. Henderson.	K. H. Bond ...	"	" " "	Fms. 911 & 138 30.4.34 to 22.6.34	5.10.34
Port Hobart, M.V.	T. Kippins	G. M. B. Lovegrove, L. E. Ring, P. Beaham.	... ..	M.L.	" " "	Fm. 915 25.8.34 to 29.11.34	13.12.34
Port Hunter ...	R. S. Durham, D.S.C.	A. J. Knell, E. Rogerson, R. R. Russel.	... ..	S.	" " "	Fms. 911 & 138 22.8.34 to 30.12.34	16.1.35
127 *† Port Wellington	R. Needham ...	E. Lougheed, O. S. Sheard, F. Poulson.	R. Shackleton ...	M.	Houlder ...	" " 18.11.34 to 7.2.35	15.2.35
106 *† Princessa ...	A. B. Friend ...	J. W. Botterill ...	... ..	S.	Reardon Smith ...	Fm. 911 14.5.34 to 20.7.34	1.10.34
063 *† Queen City ...	R. V. Arkwright ...	K. W. Richardson, G. A. Wild, S. H. Baldwin.	W. Banbury ...	M.-S.	P. & O. ...	Fms. 911 & 138 2.9.34 to 5.12.34	19.12.34
205 †† Rajputana ...	P. C. Headlam, R.D., Commr., R.N.R.	T. T. Ferguson, D. Armstrong, C. Hutchinson.	W. Stevenson ...	"	" " "	" " 11.11.34 to 14.2.35	18.2.35
228 †† Ranchi ...	C. E. Short ...	S. R. Leggett, L. Mercer, G. E. Law.	G. E. Smith ...	"	New Zealand Shipping	" " 20.10.34 to 20.1.35	24.1.35
224 †† Rangitane, M.V.	A. W. McKellar, R.D., Capt., R.N.R.	W. J. Glassborow, R. H. Browne, H. P. Williamson.	J. Ellison ...	"	" " "	" " 17.11.34 to 20.2.35	27.2.35
257 †† Rangitata, M.V.	J. L. B. Hunter ...	N. Baddely, C. A. Jones, J. Peter, G. Maclean, M. G. Morris.	L. V. Horn ...	"	P. & O. ...	" " 23.9.34 to 15.12.34	7.1.35
240 †† Rangitiki, M.V.	H. Barnett ...	E. G. May, W. L. Stockdale...	S. W. Sharp ...	"	" " "	" " 5.8.34 to 5.11.34	14.11.34
207 †† Ranpura ...	G. H. S. Furlong, O.B.E., R.D., Capt., R.N.R.	J. F. Phillips, W. P. Baker, J. R. Lloyd.	R. C. Lobb ...	M.	Harrison ...	" " 4.11.34 to 25.1.35	30.1.35
071 †† Rawalpindi ...	R. H. Stringer, O.B.E., R.D., Commr., R.N.R.	W. A. Hearle, R. Bridson, J. K. Campbell.	W. G. Sutherland ...	"	Pacific S.N. Co. ...	" " 13.11.34 to 2.1.35	8.1.35
247 *† Recorder ...	J. J. Egerton ...	D. H. Clegg, H. Hill, J. C. Baker.	... ..	M.L.	New Zealand Shipping	Fm. 915 26.8.34 to 1.12.34	6.12.34
132 *† Reina del Pacifico, M.V.	J. Ross ...	A. E. Bartlett, R. T. Dryden, J. L. Barrett.	N. A. Warner ...	"	A. Holt ...	" " 12.8.34 to 16.12.34	8.2.35
Remuera ...	E. A. Holland ...	H. N. Lawson, J. Knott, R. H. Carter.	... ..	"	Baron Moyne, P.C., D.S.O.	... ..	...
Rhexenor ...	J. C. F. Melling ...	N. Clarkin, H. Arton, W. E. Buckingham.	T. O'Shea ...	M.	New Zealand Shipping	Fm. 915 3.8.34 to 22.11.34	29.11.34
Rosaura, M.Y., R.Y.S.	H. M. S. Laidlaw, R.D., Commr., R.N.R.	A. Hocken, D. S. R. Martin, F. R. F. Wilson.	... ..	M.L.	Blue Star ...	Fms. 911 & 138 23.11.34 to 6.1.35	12.2.35
Rotorua ...	C. B. Lamb ...	G. Cartwright ...	... ..	S.	New Zealand Shipping	Fm. 915 6.10.34 to 22.1.35	29.1.35
203 *† Royal Star ...	T. Williams ...	T. D. Thomas ...	... ..	A.	G.W. Railway ...	Telegraphic Report 7.3.35	7.3.35
Ruahine ...	G. Kinnell ...	... ..	... ..	A.	Bunch Steam ...	Fm. 911 " 23.10.34 to 19.1.35	13.2.35
St. Helier ...	R. Pitman ...	... ..	... ..	S.	Fishing Co. ...	Fm. 912 29.12.34 to 21.1.35	13.2.35
St. Julien ...	T. Richardson ...	... ..	... ..	S.	G.W. Railway ...	Telegraphic Report 1.9.34	1.9.34
St. Keeverne, S.T.	A. Hatton ...	... ..	... ..	"	Cunard White Star	Fms. 911 & 138 21.1.35 to 10.2.35	19.2.35
100 †† St. Patrick ...	C. W. Sanderson ...	F. P. Collins, J. F. Drake, J. C. Dawson.	... ..	"	L.M. & S. Railway	Telegraphic Report 2.3.35	2.3.35
Scotia ...	W. G. Plenge ...	R. I. Jones ...	... ..	"	Cunard White Star	Fms. 911 & 138 26.11.34 to 24.2.35	2.3.35
033 †† Scythia ...	G. R. Dolphin, R.D., Commr., R.N.R.	W. M. Stewart, R. N. Youd, W. J. Foster.	R. N. Ottley ...	"	Bibby ...	" " 14.10.34 to 20.12.34	27.12.34
211 *† Shropshire, M.V.	R. P. Mann ...	A. C. Muir, J. K. Gemmel, J. S. Milner.	D. McLellan ...	"	Prince ...	Fm. 915 2.5.34 to 2.9.34	16.10.34
121 *† Siamese Prince, M.V.	E. E. Litchfield ...	W. A. Niven, H. J. Steele, R. M. Dennis.	W. Childs ...	M.L.	Thompson ...	" " 3.9.34 to 11.1.35	28.2.35
Silverwalnut, M.V.	J. Smith, R.N.R.	H. J. Dean, W. S. Welford, W. J. Lav.	J. Jenkinson ...	"	Federal ...	Fms. 911 & 138 2.7.34 to 8.11.34	7.12.34
141 *† Somerset ...	E. R. Pilcher ...	H. M. Knight, T. E. Davies, B. C. Hamilton.	H. A. Haddon ...	S.	Ellerman Wilson	Fm. 915 13.7.34 to 22.12.34	28.12.34
Spero ...	W. A. Dossor ...	A. Kirk, G. H. Duncan, G. Hodgson.	... ..	M.L.	Turnbull Martin...	Fms. 911 & 138 24.9.34 to 23.1.35	31.1.35
020 *† Stirlingshire, M.V.	F. T. Mee, F.R.G.S.	P. B. Smeaton, R. E. Smallbone, E. G. G. Mobbs.	P. B. Allison ...	S.	P. & O. ...	" " 19.10.34 to 10.1.35	12.1.35
270 †† Strathaird ...	E. A. J. W. Carter R.D., R.N.R.	R. A. B. Kimpton, R. H. Hand, L. T. Brown.	F. W. Helm ...	"	" " "	" " 4.11.34 to 6.2.35	14.2.35
059 †† Strathnaver ...	R. Harrison, D.S.O., R.D., A.D.C., Capt., R.N.R.	C. W. Mayne, S. Peters, W. Waghorn.	P. R. Hobbs ...	M.-S.	Blue Star ...	" " 10.11.34 to 31.1.35	2.2.35
274 *† Sullan Star ...	W. H. Bevan ...	G. L. Evans, J. Lewis, R. McIlraith.	P. G. Winsor ...	M.	" " "	Fm. 911 24.10.34 to 11.1.35	21.1.35
Tacoma Star ...	W. Walsh ...	D. G. Russell, J. O. Davies, J. H. Mortimer.	... ..	S.	Harrison ...	Fms. 911 & 138 14.10.34 to 27.12.34	9.1.35
229 *† Tactician ...	F. Trinick, O.B.E.	R. Swain, W. Parry, A. Moreton.	C. G. McCombe ...	M.	Shaw, Savill & Albion	" " 12.8.34 to 25.11.34	6.12.34
045 †† Tainui ...	W. Dawson ...	G. Horsey, H. Winyard, D. Pickersgill.	A. H. Bloxham...	S.	" " "	" " 24.5.34 to 21.9.34	2.10.34
081 *† Tairoa ...	S. Oswald ...	W. Thowless, H. D. Pim, J. Jackson.	H. Stemet ...	"	E. & A. S.S. Co....	Fm. 915 14.4.34 to 9.9.34	13.12.34
021 †† Tamaroa ...	G. Williams ...	T. J. Mills, F. O. Colvin, W. B. Williams.	W. Harris ...	M.-S.	A. Holt ...	Fms. 911 & 138 26.10.34 to 8.1.35	19.2.35
264 *† Tandra ...	E. T. Pilcher, R.N.R.	W. F. Dark, J. MacPhee, N. P. Smith.	J. Nicholas ...	S.	Shaw, Savill & Albion	" " 15.8.34 to 26.11.34	3.12.34
165 *† Tantalus, M.V....	W. T. Birch ...	T. B. Marsdon, B. M. Morris, A. G. Fisher.	W. Shotten ...	"	New Zealand Shipping	" " 2.7.34 to 4.11.34	13.11.34
047 *† Taranaki, M.V.	W. J. Williams...	L. W. Fulcher, A. Kirk, R. C. Robinson.	F. Gardiner ...	M.	Aberdeen Commonwealth	" " 18.11.34 to 21.12.34	22.1.35
069 *† Tekoa ...	J. Howell Price, D.S.O., D.S.C.	E. Johanson, G. Hawley, J. Wildsmith.	G. M. Hardie ...	M.-S.	A. Holt ...	" " 22.11.34 to 30.12.34	11.2.35
048 †† Themistocles ...	C. Wood, D.S.C.	J. A. C. McGregor, A. R. Davidson, J. M. Sim.	G. Pearce ...	S.	New Zealand Shipping	" " 20.5.34 to 30.9.34	2.10.34
161 *† Titan ...	W. B. Ewan ...	G. W. Pring, L. Mercer, J. W. Leslie.	E. G. Stride ...	"	Anchor ...	" " 18.11.34 to 24.2.35	27.2.35
244 *† Tongariro ...	P. B. Clarke, D.S.C.	R. L. Robertson, I. McVey, L. Omjisi.	J. McDonald ...	"			
025 †† Transylvania ...	W. Rome ...						



Name of Vessel.	Captain.	Observing Officers.	Senior Wireless Operator.	Meteoro-logical Instrument Equip-ment.	Line.	Logs, Registers, or Records Contributed. 2.12.34 to 7.3.35.	Date Last Return Received.
119 *† <i>Trojan Star</i> ...	S. Lewis ...	W. A. G. Curphey, W. L. Hall, F. O. W. Stokes.	L. Waterhouse...	M.	Blue Star ...	Fms. 911 & 138 22.9.34 to 28.12.34	3.1.35
245 *† <i>Turakina</i> ...	J. Laird ...	G. E. Mason, R. H. Browne, C. S. Thomas.	N. Hallett ...	"	New Zealand Shipping Anchor ...	" " 23.3.34 to 6.7.34	11.7.34
276 †† <i>Tuscania</i> ...	G. B. Kelly ...	J. Noble, J. Gibson, D. Barclay.	J. Fleming ...	S.	Blue Star ...	" " 19.10.34 to 2.11.34	6.12.34
<i>Tuscan Star</i> , M.V.	G. Wilson ...	R. T. Hales, L. Mates, J. H. Bayne.	... ..	M.L.	Blue Star ...	Fm. 915 17.10.34 to 11.1.35	15.1.35
113 *† <i>Upwey Grange</i> , M.V.	H. P. Goodrick ...	A. Bradbury, G. T. Hurst, P. J. Walker.	— Jones ...	M.	Houlder ...	Fms. 911 & 138 2.10.34 to 10.12.34	14.12.34
176 *† <i>Vancouver City</i> , M.V.	H. E. Egerton ...	H. David, J. K. Robson, L. A. Harvey.	A. J. Sloan ...	S.	Reardon Smith ...	Fm. 911 17.11.34 to 22.2.35	2.3.35
275 †† <i>Vandyck</i> ...	V. Gore-Hickman ...	... ..	... ..	"	Lamport & Holt ...	... ..	...
079 †† <i>Viceroy of India</i>	E. J. Thornton, R.D., Capt., R.N.R.	E. R. Rose, M. Ferraby, M. Greasley.	H. S. Horn ...	M.-S.	P. & O. ...	Fms. 911 & 138 28.10.34 to 21.2.35	25.2.35
053 †† <i>Voltaire</i> , M.V.	P. Symons.	F. J. Durrant, D. P. Woods...	W. Burnett ...	S.	Lamport & Holt Shaw, Savill & Albion	" " 22.12.34 to 7.1.35	10.1.35
<i>Waipawa</i> , M.V.	J. W. Johnson ...	... ..	... ..	M.L.	Union S.S. Co. of N.Z.	... ..	...
263 *† <i>Wairuna</i> ...	F. L. G. Jauney ...	N. Liepen, R. Brebner, H. H. Pike.	R. Bell ...	"	Shaw, Savill & Albion	Fm. 915 29.4.34 to 4.11.34	24.1.35
212 †† <i>Waiwera</i> , M.V.	J. H. Gaskell, R.D., R.N.R.	R. G. James, C. Heywood, A. Mackenzie.	A. Babbage ...	S.	Union Castle ...	Fms. 911 & 138 30.11.34 to 19.12.34	3.1.35
005 †† <i>Warwick Castle</i> , M.V.	W. M. Betts ...	C. R. Purse, J. Oakley ...	H. Oliver ...	"	New Zealand Shipping Falkland Is. Govt.	" " 18.11.34 to 5.1.35	8.1.35
056 *† <i>Westmoreland</i> ...	E. R. Kemp ...	R. Coen, H. Forster, G. Letts	R. Glover ...	"	Union Castle ...	" " 17.9.34 to 18.1.35	23.1.35
129 †† <i>William Scoresby</i> , R.R.S.	C. R. U. Boothby, R.N.R.	E. E. Clifton ...	... ..	M.L.	Union Castle ...	Fms. 911 & 138 13.10.34 to 3.2.35	6.2.35
208 †† <i>Winchester Castle</i> , M.V.	J. H. Kerbey ...	R. F. Pembry, S. S. Smith ...	W. A. Smith ...	S.	Southern Railway Henderson ...	" " 13.11.34 to 27.2.35	6.3.45
096 †† <i>Windsor Castle</i> ...	A. Barrow ...	G. Mayhew, J. D. Fisher ...	J. Hodgson ...	"	Telegraphic Report	Fm. 911 7.3.35	7.3.35
<i>Worthing</i> ...	B. Shaw ...	H. Smith ...	C. Kelley ...	"	Fm. 911 25.8.34 to 7.11.34	9.11.34	9.11.34
<i>Yoma</i> ...	J. A. Wilson ...	J. Crawford, P. D. Barr, A. Driscoll.	... ..	M.	Shaw, Savill & Albion	Fms. 911 & 138 6.12.34 to 24.12.34	4.1.35
043 *† <i>Zealandic</i> , M.V.	H. R. Gordon ...	G. Sangwin, K. Miller, G. Roe.	H. Palmer ...	S.			
<i>Conway</i> , H.M.S.	T. M. Goddard, Commr., R.N.R.	The Senior Cadets ...	... ..	Cadets M.L.	... ..	Cadets' Met. Log. 23.9.34 to 16.12.34	3.1.35
<i>Pangbourne Nautical College</i> .	A. F. G. Tracy, Commr., R.N.	" " ...	... ..	"	... ..	" " 19.9.34 to 18.12.34	3.1.35
<i>Worcester</i> , H.M.S.	G. C. Steele, V.C., Commr., R.N.	" " ...	... ..	"	... ..	" " 27.9.34 to 18.12.34	14.1.35
<i>Watling Island</i>	... ..	The Keepers ...	... ..	Lighthouse Register	... ..	Lighthouse Register 1.7.34 to 31.12.34	15.2.35
<i>Cape Pembroke</i> ... (Falkland Is.)	... ..	" " ...	... ..	"	... ..	" 1.7.34 to 31.12.34	15.2.35

## SHIPS WATER SAMPLING THE NORTH ATLANTIC. FISHERIES LABORATORY, LOWESTOFT.

Name of Vessel.	Captain.	Observing Officer.	Line.	Received at Government Chemist, London.
<i>Dakarian</i> ...	W. Baird ...	A. A. Heaton ...	Leyland ...	30 Water Samples, 14.1.34.
<i>Darian</i> ...	T. Chapman ...	L. Seddon ...	" ...	{ 30 " " 5.12.34.
<i>Davisian</i> ...	T. J. Higson ...	W. Lawton ...	" ...	{ 30 " " 20.2.35.
<i>Dorelian</i> ...	J. Collins ...	G. Penston ...	" ...	{ 30 " " 17.12.34.
<i>Hilary</i> ...	R. H. Buck, R.D., Capt. R.N.R.	G. E. Freeman ...	Booth ...	{ 30 " " 11.12.34.
				{ 60 " " 5.12.34.
				{ 60 " " 30.1.35.

April, M.O., 1935.



# PUBLISHED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE

## MARINE METEOROLOGY.

### ATLASES :—

#### ATLANTIC (NORTH) :—

Atlas of Currents on the Main Trade Routes of the North Atlantic. (No. 323, 1930.) 6s. 6d. ( $29\frac{1}{4} \times 19\frac{1}{2}$  in.)

#### BAFFIN BAY AND DAVIS STRAIT :—

Monthly Meteorological Charts of Baffin Bay and Davis Strait. (No. 221, 1917.) 8s. ( $30 \times 25\frac{1}{2}$  in.)

#### RED SEA :—

Meteorological Charts of the Red Sea. (No. 106, 1895.) 21s. ( $22 \times 13\frac{1}{2}$  in.)

#### SOUTHERN OCEAN :—

Meteorological Charts of the Southern Ocean between the Cape of Good Hope and New Zealand. (No. 123, 1917.) 7s. 6d. ( $12\frac{1}{2} \times 9\frac{1}{2}$  in.)

### BOOKS :—

**A Handbook of Weather, Currents and Ice, for Seamen.** (No. 379, 1935.) 4s. (8vo.)

**The Marine Observer's Handbook.** Fifth Edition. (No. 218, 1930.) 2s. 6d. (8vo.)

**Decode** for use with the International Code for Wireless Weather Messages from Ships, with notes for the guidance of masters of British ships for making Weather Reports. Third Edition. (No. 329, 1934.) 6d. (8vo.)

### JOURNAL :—

#### **The Marine Observer.**

The quarterly review of the Marine Division of the Meteorological Office in co-operation with Voluntary Marine Observers; with monthly supplements.

Deals with Weather, Climate, Currents and Ice as they are met in daily life at sea :—

Quarterly numbers 4s. net, 2d. postage; Monthly Supplements 6d. each net, 1d. postage.

Annual Subscription (including Supplements) 21s., post free. Cover for Volume 2s. net, 4d. postage.

---

The Publications in this list can be purchased directly from  
H.M. STATIONERY OFFICE at the following addresses :—  
Adastral House, Kingsway, London, W.C.2; 120 George Street, Edinburgh 2; York Street, Manchester 1;  
1 St. Andrew's Crescent, Cardiff; 80 Chichester Street, Belfast;  
or through any Bookseller.

Printed under the authority of His Majesty's Stationery Office  
By Eyre and Spottiswoode Limited, East Harding Street, E.C.4,  
Printers to the King's Most Excellent Majesty.



ANNALS OF THE METEOROLOGICAL COMMISSION

1871